

Ask-A-Luthier

Answers to questions on stringed instrument repair by Steve Mason

1st fret buzz

Q: I recently helped my son build a Warmoth custom guitar with a Floyd Rose bridge. After setup everything seems nearly perfect (perhaps dumb luck) except there is a buzz on the first fret of the high E and nowhere else. Most peculiar to me is that it does not seem to matter if the action is higher or lower it buzzes either way, not a real lot but it's there. It seems like maybe its the nut as it looks so low at that particular string and my question is can (should) this be shimmed slightly to bring up that 1 string? Playing up the neck after fret 1 is all ok...thanks.

A: Your nut and frets should all be exactly the same height. If any fret is too low the string will buzz against the next fret. The only problem that fits the evidence on your Warmoth is that the nut is cut too low under the E string. If your nut is made of bone or Tusq, you can fill the slot with bone dust and superglue or bone dust and epoxy, and then refile it. If it is plastic or metal you will need to shim the whole nut and then file down the other five slots. Or replace the nut and adjust all six.
- Steve

The Brightest Nut & Saddle

Q: I have a 1958 mahogany top Gibson in good shape. I'm debating between a bone nut and saddle or a real ivory nut and saddle. I want to get as bright of tone from her as possible. Which do you suggest?
- Joseph, N.E. Ohio

A: The cruel truth is that the brightest nut and saddle are made out of Tusq.

It is a high tech plastic. It is much more "live" than either bone or Ivory. When you drop it on a hard surface it "rings." Taylor guitars come from the factory with Tusq. Needless to say, Tusq would not be original equipment on a 1958 Gibson. Ivory is illegal.

I have a lot of Ivory from elephants killed before 1975. This Ivory is technically legal but if you were stopped at an international border you would have to prove its age to cranky, unsympathetic customs agents. Fossil ivory comes from woolly mammoths. It's voracity is easier to prove because it just looks old. Ivory "rings" like Tusq but it is much heavier.

I use bone for almost everything. It works easy and sounds good. It's traditional, and cheap.
- Steve

Veneer and Bridged

Q: I need to know if there is any tone changes in the wood for the headstock veneer, also any tone change for bridge (does the grain have to be straight or can it be twisted like mesquite).

I want to sue mesquite as a bridge and headstock veneer. I know how tough it is but I have been playing with it lately and man is it beautiful. Would make a nice fret board also.
- Mike

A: I have never used Mesquite. I am sure that there is no down side to using it for a peghead overlay. Kasha, in the 1950s showed that you can improve the sound of any guitar by putting a C clamp on the peghead. String vibrations, being unable to move the peghead will turn back down the neck and vibrate the bridge. So, the heavier the peghead is the better. Enclosed gears like Grover Rotomatics should make a guitar sound better than Waverlys. The weight difference between any two hardwood headstock veneers would be slight. So go with whatever you think is pretty.

I use Brazilian Rosewood for my bridges. It is light and very hard and carries vibrations faster than other woods. That being said, I have heard great sounding guitars with a wide variety of hardwood bridges. I would consult the wood books to see how Mesquite's characteristics compare to the more traditional bridge woods. If you find Mesquite's hardness to be in the range of ebony or rosewood or even maple, give it a try.
-Steve

About the author:

For a day job Steve is a luthier: one who repairs, improves and creates stringed instruments.

To make a guitar, he starts with a tree and carves away everything that doesn't look like a guitar. He plays fiddle, guitar, bass, mandolin and sings in the Alferd Packer Memorial String Band: alferdpackerband.com

