

Since I started working for Liberty Banjo in the 1970's, I've been exposed to a lot of instruments and players over the years and have built and set up numerous banjos for these people. In the early 80's, I started my own business here in Stratford, Connecticut where I continue to build custom-designed banjos along with my archtop and flattop guitars.

Setting Up an Old-Time Banjo

By
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I was given a Yosco to work on. It sounded dead, worse than dead. It belonged to Ray Alden, a musician, producer, and promoter of old-time music. He finds them wherever he can. This one he found down south somewhere. I've been making banjos for ray since the 1970's and with his vivid imagination, he has come up with some interesting if not bizarre instruments. I wasn't surprised to see this Yosco since it was the fourth one Ray has brought me. For those not familiar with Yoscos, they are somewhat obscure banjos made in the 1920's, and are built with a double enclosed rim, so that from the back they look like big donuts with a stick through them. While usually being a challenge, in the sense of getting a good sound out of them, this one was particularly difficult. With a giant 13^{1/2}" head and with the original 21" scale tenor neck, I had my doubts as to its future.

I've found that the stiffness or rigidity of the neck is a big factor in getting the maximum tone and volume from a banjo and other related instrument. It is an aspect I've found if often overlooked. Of course, when you're setting up an existing banjo, it's a little too late to do anything about this issue unless it is a last resort. Over the years, I've added stiffening rods to many different instruments. On some, the results were dramatic, and I can think of two instruments in particular.

One was a Farland Black Beauty, which had a severe forward bow problem. Not atypical since the neck was made of poplar wood and a fingerboard veneer of what was referred to as "industrial ebony," which was simply dyed boxwood. This project included a scale change so that the original fingerboard had to come off. At this point – I decided to install a truss rod in the form of a 1/4" square solid-steel rod coupled with a 3/16" ebony fingerboard. What once was a weak, muffled-sounding banjo was now a bright, sweet and alive old-time banjo.

Another case, not relating to old-time banjos but illustrating what I mean, involved a Neapolitan mandolin. In this case a bowed neck was corrected by removing the fingerboard and installing another 1/4" square steel rod and replacing the fingerboard. Again, the results were dramatic. Similar results can be obtained using a Martin-style 3/8" square hollow rod or graphite/epoxy rods instead, with much less weight. An adjustable truss rod, I've found, does not necessarily add rigidity to a neck.

The fit of the heel is one of the least considered factors in getting the most out of a banjo. But it is one of the most important. Without the benefit of a glued dovetail joint as in the case of a

guitar or mandolin, a banjo relies on a solid fitting heel along with an adequate bracing device. I couldn't begin to count the number of banjos I've seen with ill-fitting heels, either due to mismatched parts, amateur resets, or simply shimming the neck at the fingerboard to change the neck angle. Any or all of those need to be corrected before maximum sound can be achieved. The bridge is possibly the one part of a banjo that can alter the sound the most. You'll find a variety of different bridges in the case pocket of many banjos. Each one undoubtedly varies the sound a bit or, depending on the bridge, quite radically. I've seen just about any variation you can imagine although I'm always being surprised. These run from plain maple two-footed bridges to ebony and bone topped compensated styles, and every player seems to have their own opinion of what sounds the best. Because of this fact, it is difficult to say what is bad and what is good in the way of bridges. At least it can be said that old, broken or warped bridges should be replaced. My preference, if using a store bought bridge on an old-time banjo, is the ebony-topped maple bridges readily available from most suppliers. I normally will set up a banjo with a style of bridge I make myself. It is bone-topped maple, solid at the base, with holes drilled into the body to reduce mass.

In my opinion, there's absolutely no contest between a real skin head and a Mylar or otherwise synthetic one. A skin head is definitely superior. I believe a natural skin makes the banjo sound alive. I can almost compare it to an old vintage guitar, which takes on natural resonance over the years in comparison to the sound of a plywood guitar. Of course, there's the problem with humidity since the head is really a piece of leather, which will shrink and expand with the weather. I think it's well worth the trouble. Whatever head is being used should be in good shape and not coming loose at the flesh hoop, the small metal ring the head is tucked on to. I've seen countless banjos from the 1890's through the 1950's, which still had their original skin head on them. Most manufacturers recommended changing the head once a year. I recommend that also, or at least every two years or so. This goes for both natural and man-made heads. A surefire way to kill the sound of a banjo is to tighten the head unevenly. Roughly speaking this is the equivalent of an unevenly carved top on a jazz guitar or unbalanced bracing on a flattop. How tight the head is depends on the sound the player prefers within sensible limitations. Some like a looser sound for a melancholy Civil War era sound. Some prefer to tighten their heads one turn before it breaks. This is good for, as some say, "to peel the bark off a tree."

On an average old-time banjo there are over 130 parts, which either screw or fit together. Any of these parts, if loose or not fitting correctly, can adversely affect the overall sound. Loose parts can also be responsible for buzzing, dead notes or just a lack of volume or tone. I found that checking every single part for fit and snugness should be a procedure done on every banjo being set up. On my own banjos, I use twenty sets of hooks and nuts instead of the usual twenty-four. Not only does this reduce the metallic weight of the instrument but also it cuts down on the amount of parts by twenty.

You might be wondering what happened to that 13 1/2" Yosco. Ray decided he wanted to make this a fretless, which meant this banjo needed to produce. Applying the five items we just discussed, this instrument turned out to be one of the sweetest and soulful fretlesses I've ever heard. Although people's tastes vary, the prime directive is to get the most out of a banjo. It is truly a responsibility to care for someone's instrument. If you need assistance, call someone (including myself) who specializes in banjos.