

# Banjo Maintenance / Setup Information

## By: Wayne Rogers

Your instrument has been fully adjusted at the Gold Tone Factory in Titusville, FL prior to being shipped. However, due to the nature of the stringed instruments, periodical adjustments will have to be for superior sound and excellent playability. Also, depending on individual preferences and playing methods, our "standard setup" may not suit your taste. Gold Tone recommends you take your banjo to an authorized Gold Tone dealer at least once a year for "fine tuning." This would include checking action, positioning bridge, tightening head, check for any loose parts, steel wool polish on frets, oiling fingerboard, changing strings, adjusting nut, truss rod, coordinator rods, and tail piece... well worth the \$75-\$125 most music stores will charge. Also, if you play daily, and want excellent tone, I recommend you change strings at least every 3 months.

Adjusting the action successfully is a result of 5 adjustments: head tension, truss rod, coordinator rods, nut slot height, and bridge height. Also, string gauge, tailpiece adjustment, and fret wear are a factor.

**String Gauge:** Any action adjustments should be made with the gauge of strings you plan to use. If your action is low, too light of a gauge of strings may cause fret buzz because the tension of the string is too loose for your playing style... the thicker the string gauge, the less it will "bounce around" after playing. Generally, all our 5 string banjos are set up with the following gauges .010 .013 .016 .024 .010.

Banjitaras are .010 .013 .018 (w) .030 .042 .052.

**Head Tension:** Different types of heads will affect sound dramatically. The common choices are frosted (used often for bluegrass), clear or frosted undercoated (used for tenors, plectrums, and banjitaras), and Remo® Fiberskyn or Renaissance (for clawhammer). There are many theories about head tension and sound. Generally, the tighter the head the brighter the sound, but some theories suggest that too tight will "choke" the sound. Although we supply a wrench to fit the nuts, the best tool to use is an adjustable tip screwdriver and remove the tip. The socket will fit our nuts perfectly. To tighten the head, remove the resonator and locate the nut on the hooks. Starting on one side of the neck, tighten each nut 2/3 of a turn. Tighten the nut next to it and continue to the other side of the neck. Use your thumb to "press" on head around bridge to feel head tension. It should be very slightly under moderate pressure. If you continue to tighten, use ¼ or 1/8 turns to avoid breaking head. Note: As the head is tightened the action will rise.

**Truss Rod:** Must be adjusted with the correct string gauge at normal tuning. THE TRUSS ROD DOES VERY LITTLE FOR ACTION HEIGHT! Look down the edge of the fingerboard and make sure neck is straight or has a very slight bow (away from the middle of the string). If the truss rod is tightened clockwise (with Allen wrench) it will help straighten the neck. If it is loosened counterclockwise, it will put a slight amount of bow in the neck, which is preferred for the lowest action without buzz. This adjustment may be better left to a repair tech. (Do not use excessive pressure in truss rod adjustment... truss rods can break)

**Neck Angle (Coordinator Rods):** All Gold Tone banjos use a double coordinator rod system for neck stability and adjustment flexibility. Generally, the string action at the 12<sup>th</sup> fret (measured from the top of the fret to the bottom of the string) is between 1/8"-3/8" depending on your playing style. To lower string action, loosen both nuts on the inside of the rim. Tighten the outside nut on rod closest to you. That will "pull on the rod" creating a very slight bend in the wood rim and will lower the action. Do not over tighten, this could damage the rim. To raise action, loosen the outside nut and tighten the inside nut. This will "push" on the rod creating raised action. Snug all nuts.

**Nut Slots:** The slots of the nuts are adjusted at our factory, and you should not have to adjust. Sometimes tuning problems may result from the nut slot "pinching" the string. If the string doesn't pull smoothly through the nut slots when tuning, it may need to be opened slightly with a small file. Also, take a pencil with a sharp point and "color" the inside slot of nut. The graphite will help lubricate the nut slot. If a nut slot is too deep, and the string is buzzing on the first fret try this solution: using thick super glue and a toothpick, apply one drop in the slot and let dry overnight. This will slightly raise the slot and eliminate the string buzz.

**Bridge Height:** Most common is 5/8", but higher bridge height is sometimes used depending for playing style or sound. To position bridge, take measurement from back of nut to middle to twelve frets. Using that measurement distance, position the bridge away from center of the twelfth fret. Using a good electric tuner, tune the first open first string. Now gently fret the octave (12<sup>th</sup> fret). If the tuner reads flat, move the bridge towards fingerboard, if it reads sharp move the bridge towards tailpiece. Now do the same with the lowest string. The bridge may have some slant as it sits on the head. You may want to mark this location with a pencil. Bridges will bend, except for our Blazer graphite, after some period and must be replaced.

**Tailpiece Adjustment:** Generally, the closer the tailpiece is adjusted to the head, without touching the head, the brighter the tone. You may adjust with full string tension by pressing on tailpiece and adjusting thumbscrew.

### The Ultimate Gold Tone Maintenance Schedule

**After every playing:** Wipe instrument off and polish all metal and wood with cloth. Using a different cloth wipe strings, especially under them. Apply Fast Fret (GHS) to strings.

**4-6 time yearly:** Change strings, apply pencil led to nut slots, use 0000 steel wool to clean and polish fingerboard and frets, apply lemon oil to fingerboard, check and make sure bridge is not bent in the middle, check head tension, check bridge placement, and tailpiece adjustment.

**Yearly:** Take to your authorized Gold Tone Dealer for adjustments as mentioned above

**For additional information call your Gold Tone dealer or Gold Tone at 321-264-1970**

**This information is also available at [Goldtone.com](http://Goldtone.com) under resources**