Maintenance and Set Up of Ode Banjos - Updated 2023

Your Ode is a precision instrument. It needs to be carefully maintained and set-up for optimum tone, response, and playability. Banjo maintenance is relatively simple and can easily be implemented. Banjo set-up is more of an art and there is no substitute for experience in doing this. If you are not experienced in banjo set-up, get the help of someone who is until you become familiar with the process.

Part One - Banjo Maintenance

I. Humidity and Temperature

• *Extreme and rapid changes in humidity and temperature can damage your banjo.* If possible, store your instrument within the temperature ranges of 50 to 80 degrees, and 30 to 60 percent humidity. Do not leave your banjo in excessively hot, cold, damp, or dry locations. Store the banjo in its case when not in use.

II. Storage, Travel, and Shipping

• Sore your banjo in its case. Your case protects your banjo against rapid changes in temperature and humidity and also against accidental impact. When storing for long periods of time, loosen the strings.

• *Automobile travel* - Storing your banjo in the trunk of a car is asking for trouble. Trunks can quickly become an oven or icebox causing serious damage to your instrument. If you have to use the trunk for "out-of-sight" storage, make sure the trunk is not exposed to the sun (park the car in the shade). If the banjo is in the passenger compartment, keep it out of the sun, or at least covered with a blanket or coat.

• *Airline travel* - If possible, carry your banjo in its case on the plane and store it in the overhead compartment. If you have to check the banjo as checked luggage:

1) loosen the strings

2) secure the peghead and body of the banjo with padding so there is no instrument movement in the case.

• Banjo shipping - If you must ship your banjo:

1) Loosen the strings and lay the bridge flat.

2) Make sure there are no loose parts floating around inside your case.

3) Using bubble or foam padding, secure the peghead and body of the banjo so there is no instrument movement in the case.

5) Insert the case into a heavy oversize cardboard carton with at least 2" padding on the top and bottom, and 1" padding on all sides, seal the box and insure.

III. Loose Parts

• *Periodically tighten and loose parts.* Banjo components can vibrate loose over time and use. Loose screws and nuts can cause loss of tone, lost parts, and even damage to your instrument. Periodically check the bracket nuts and tuning peg screws and make sure the neck is secured solidly to the Rim with the rim sicks. See the banjo set-up section for more detailed information on adjusting loose parts.

IV. Finish

Wipe off your Banjo and strings after use.

• *Neck and rim finish* - Ode banjos have three coats of a hand rubbed finish from General Finishes called Arm-R-Seal on the rim and neck (not the fingerboard). It is a very durable finish and will last a very long time, but if you find it wearing away, the finish can be renewed by applying a few light coat of Arm-R-Seal over where you see it rubbing away. Follow Arm-R-Seal manufacturers directions.

• Fingerboards - Fingerboards can be rubbed with mineral oil or lemon oil on as-needed basis. Be sure to rub excess off after a few minutes.

• Aged brass hardware - Aged brass is achieved by oxidizing polished brass and has a greenish bronze color with touches of pinks and blues. With use, some oxidation will rub off over time but this can be renewed by touching up with a brass oxidizer.

Part Two - Banjo Set-Up

Your Ode was carefully set-up in our shop in Boulder, Colorado before we sent it out. However, with use and over time, components can move and your banjo's set-up can change. Generally, your banjo's set-up should be checked every 6 months or so to maintain optimum performance. Additionally, because banjos are very adjustable, you might want to experiment with different set-ups to vary your instrument's tone, response, and playability. Please remember, Banjo set-up is an art and there is no substitute for experience in doing this. If you are not experienced in this, get the help of a knowledgeable player or luthier until you are comfortable with the adjustments.

I. Neck

• *Neck adjustment* - There is an adjustable "Tension Rod" in every Ode neck. Most musicians prefer for the neck to have a slight up-bow. We ship the neck with a .01" – .015" relief. The easiest way to check this, is to sight down the fingerboard edge from the nut to the rim. There should be a very slight up-bow. A more precise way to check this, is to hold down the 3rd string on the first and last frets simultaneously. There should be a space between the top of the 7th frets and the string that is roughly about the thickness of a business card. If this space is greater, the intonation may be off along the fingerboard. If the space is less, the strings may buzz.

• For more up-bow, (less buzz), loosen (counterclockwise) the neck tension rod nut under the peghead cover. For less up-bow, tighten (clockwise) the nut. When adjusting the tension rod nut, only do a $1/8 - \frac{1}{4}$ turn at one time and never over tighten. If the adjusting nut is difficult to turn, aid the adjustment by bending the neck slightly in the desired direction while turning the adjusting nut. Remember, too much torque can break the rod and ruin the neck. If you're not experienced at this, get professional help.

• The way to adjust the rod in your Ode neck is in the heel of the neck, which requires removing the neck for adjustment. We highly recommend having this done by a service professional.

• *String nut* - Most String Nuts are made of bone and may wear over time causing a buzzing or duller sound on the open or unfretted string. If so, the nut slots may be too low or simply worn out. A luthier can revive the nut with a careful layer of super glue and bone dust in the slot and then reshaping the slot with a nut file. The nut slots should slope down towards the peghead. The 5th string nut can also be similarly maintained.

• *Tuning pegs* - Ode Tuning Pegs are packed in grease and sealed and do not need lubricating. There is an adjustment screw at the knob end of the peg that can be tightened to keep the peg from slipping.

II. Rim Sticks

• *Wood rim sticks* - Ode necks are attached to the pot with a round wood rim rod and a brass ball lug. This connection should always be tight so the neck does not move. Should the neck become loose, tighten the wood rim rod by hand, and tighten the Ball-lug by inserting a small allen wrench or nail into the lug's hole.

• The string action on banjos with a wood rim stick can be varied slightly by adding or removing a washer at the tailpiece end of the rod. When the action is too low add a washer. When the action is too high, remove a washer. Note: it's a mistake to use this method for more than a minute action adjustment. Any major changes in the playing action should be accomplished by changing the bridge, or by re-cutting the heel to the appropriate angle.

III. Banjo Heads

• *Head adjustment* - The banjo's head is essentially the "soundboard" of your instrument and greatly affects tone. Generally, the tighter the head, the brighter the sound. The looser the head, the darker the tone. Many Bluegrass players like to tune their heads to a G# (90 on a drum dial) for a "bright" response. Open-back players normally prefer lower head tension for a "darker" tone. If the head is too loose, response suffers, and the bridge will depress too far creating string buzz. You can also over-tighten and break the head if you're not careful. Keeping the tension hoop and head tension even all the way around is always best. This can be easily achieved by adjusting the 5/16" bracket nuts evenly, which is largely a matter of feel.

• *Head replacement* - All Ode heads are weather resistant mylar, and need not be replaced unless broken (when there are soft spots around the rim perimeter) or totally stretched out (when the tension hoop pulls down below the rim). To replace the head:

1) remove the neck, tailpiece, armrest, brackets, tension hoop, and the old head. While the banjo is apart, this is a good time to clean and polish the components, and to put a tiny drop of oil on the threaded end of each bracket hook before reassembling.

2) Next, place the new head on the rim then proceed replacing the tension hoop and bracket nuts and hooks.
3) Tighten the bracket nuts evenly, making sure the tension hoop pulls down evenly over the rim, until the desired tension is reached. Note: new heads will have to be periodically retightened until they "settle in" and become stable. Note: you can also change the head without removing the neck but you will have to be very careful not to damage the fingerboard when removing the tension hoop with the neck still attached.

• Mylar banjo heads are pre-mounted and are the most widely used banjo heads today. We use Remo's Low Crown Renaissance heads, as we feel they give the best balance between bass and treble. Fiberskyn heads are heavier and look like animal skin, but they reduce response because of their thickness. Animal skin was the only material used for banjos heads until the 1950's. These do have a wonderful tone if they are correctly installed and the humidity is just right. However, as humidity changes, animal skin heads shrink and expand causing tone and playability to change.

IV. Bridge

• *Bridge types* - The banjo's bridge is the least expensive, easiest to change, component of your banjo. There are many types of banjo bridges available today. The most popular is still the three legged maple & ebony bridge. Some players prefer the 3rd string to be compensated with a notch or curve, while others prefer a straight bridge. The bridge's height normally varies between 9/16" and ³/₄", and string spacing runs between 0.42" to 0.44". Bridge weight generally runs between 2 and 3 grams. All of these variables can affect your banjo's tone. For example, a heavier bridge gives a darker, warmer tone while a lighter bridge gives a brighter, crisper tone. Bridge Woods also vary and affect tone. Which bridge should you use? As with most of the set-up variables, it's up to the player. What works best for you.

• *Bridge location* - As the banjo's bridge is moveable, periodically check its position by checking the harmonics at the 19th or 12th frets, and comparing the note with the fretted note at the same fret. If the fretted note is sharp, move the bridge slightly towards the tailpiece; if the fretted note is Flat, move the bridge forward towards the peghead. You may also want to slant the bridge slightly and to mark its position with a small pencil dot for future reference.

• *Bridge height* - Normally, for a banjo with the bridge properly located, the optimum string height would be about 1/8" away from the 12th fret, and 9/64" above the last fret. Minor adjustments in string height can be obtained by adjusting the Coordinator or Rim rods, or by using another bridge.

V. Strings

• Ode Strings are Nickel Wound, and Chenille wrapped for optimum tone and longevity. They are available in light, Medium, and Heavy gauges. Fretless Odes strings are Nylgut by Aquila.

• *String longevity* - With use and exposure to perspiration and humidity, strings will eventually lose their tone and accuracy (intonation). Wiping off the strings after use will increase their longevity. As to when to change the strings, opinions vary from a few days to several months, depending on use, the environment, and the player's preferences.

• New strings are brighter and more responsive but may require playing on for a few days before mellowing out. Nickel wound strings may be brighter and last longer while bronze wound strings may have a warmer tone. On 5-string banjos, only the 4th string is wound. On tenor banjos, the 3rd and 4th strings are wound. Heavier strings are generally warmer, louder, and fret harder, while lighter strings are brighter, and fret easier.

• *Replacing strings* - When changing strings, remove and replace one string at a time. This will minimize bridge and tailpiece movement. After removing an old string, you may rub some pencil lead into the nut slot, allowing the new string to slide more easily into tune. Loop the new string end over the appropriate tailpiece anchor pin, through the tailpiece string hole, over the bridge and nut and pass it through the tuning peg hole from the center of the peghead towards the outside. While leaving a little slack in the string length, bring the free end of the string back around the top of the peg shaft and under and around back over the existing string length and pull it up, trapping it between the string and tuner post (see diagram). Remove any slack by pulling on the string, while tightening the tuner knob until slack is taken up. Make sure the strings come off the inner side of the tuner post. Clip off and bend downward, the ends of newly installed strings.

VII. Tailpiece

• *Tailpiece adjustment* - Ode uses a No-Knot tailpiece design. The nut on the bottom of the tailpiece bolt adjusts the tailpiece height relative to the tension hoop; ideally, without string tension, the tailpiece will rest snugly on the top of the tension hoop. This should be adjusted by hand only.

To register your banjo, register online at odebanjos.com/warranty, or fill our and mail this warranty card to:

Ode Banjos 11510 Gold Hill Rd Boulder, CO 80302

Or scan and email it to: <u>odebanjos@gmail.com</u>.

LIMITED LIFETIME WARRANTY

This ODE instrument is warranted to the original owner, without time limit, against defective materials or imperfect workmanship. All warranty work must be done at the ODE shop; shipping costs to and from ODE are to be paid by the owner. This warranty does not cover repairs necessitated by accident, exposure, the natural properties of materials used, carelessness, or normal use. ODE Banjos may verify original ownership before providing warranty services.

Complete and return this warranty card to ODE to insure owner registration.

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