KEITH BANJO TUNERS

TO INSTALL:

1. Remove the 2nd and 3rd strings and tuning pegs from your banjo. Then compare your two Keith Tuners. **The spools on which the strings wind are of different sizes**.

2. <u>The Keith Tuner with the larger spool is for the second string</u>. Remove the nut and washer and insert it through the headstock. positioning it so that the two side thumbscrews can be conveniently reached while tuning. Put the flat washer and the nut back on, and tighten securely.

3. Similarly, install the Keith Tuner with the smaller spool for the third string.

* **PLEASE NOTE:** When tightening down the nuts, use a smooth-jawed adjustable wrench. Pliers will scar the metal, and may slip off and damage the headstock. If the holes in your banjo's headstock are too small for the Keith Tuners, we recommend having them drilled out by a qualified instrument repairman.

TO SET THE STOPS:

1. Loosen all four side thumbscrews one-half a turn. The Keith Tuners will operate like standard tuning pegs. Now put on the second and third strings.

2. Tune the banjo to the open G tuning (second string - B. third string - G). Firmly tighten the black side thumbscrews (on the **second** string this is the screw **closest to the peghead** or furthest from the button, and on the **third** string it is the screw that is **FURTHEST from the peghead** or closer to the button), which **will set the high stops**. Now, tune the second string down to A and the third string down to F# (put the banjo into open D tuning) and firmly tighten the uncolored (silver) side thumbscrews. This will set the low stops. The tuners will now operate as "D-tuners". and will not turn past the high or low stops.

3. If the pearlescent buttons are not at a convenient angle to turn while playing, simply unscrew the end thumbscrew that holds the button in place and pull the button free of the shaft. Since the button will fit on the shaft in six different positions (applies to Keith only), you can install it at the angle that suits you best. Push it back on the shaft and screw in the end thumbscrew.

* **NOTE:** These directions assume that the strings are wound on the spools in the normal manner; that is, the pitch of the second string is raised by turning its tuner counterclockwise, and the pitch of the third string is raised by turning its tuner clockwise. If you prefer to wind one or both of your strings in the opposite direction, just swap the black and uncolored thumbscrews on the appropriate tuner.

A FEW IMPORTANT POINTS:

* When setting the stops, always tune up to the high note and down to the low note. Set the high stops with both strings raised, and the low stops with both strings lowered.

* Other tunings may be used besides the one described. Just remember that the stop for the higher note is set with the black thumbscrew.

* If the high note seems to come up a little flat, check to see if the string is binding in the nut or the bridge. It may be necessary to reshape the string groove, using a small knife or file. so that the string slides freely in it. It may also help to shave a little pencil lead into the grooves of the nut for lubrication.

* If the tuners have a tendency to slip when both stops are set, tighten the end thumbscrew which holds the button in place and which also adjusts the friction.

* A little grease may ooze from the tuners, particularly when they are new. This is not a sign of trouble — they are packed with grease at the factory, and it is normal that some will work its way out. Just wipe it off.

* Don't force the tuners past the stops. This could result in internal damage. Tighten the side thumbscrews firmly (by hand - don't use pliers) to prevent the stops from slipping.

* After several years of use, the grease may begin to dry out and the tuners become hard to turn. This can be corrected by removing the side thumbscrews and adding a little light oil such as 3-in-1 oil, sewing machine oil, or penetrating oil. Remember: these tuners are precision-made, and require lubrication. If you continue to use them when they are dry and hard to turn, you may cause internal damage

LIFETIME GUARANTEE

These Keith Banjo Tuners are guaranteed by Beacon Banjo Company, Inc. without time limit to the original owner against defects in materials or workmanship. We will repair or replace (at our option) any faulty Keith Banjo Tuner, provided that it has not been abused or disassembled. No other warranty is expressed or implied.

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TUNING YOUR BANJO'S (Keith Style) D-TUNERS

D-tuners take some finessing and an "out of tune" situation is very common and easy to fix.

We'll start by first taking a sharp #2 pencil and lifting out the second and third strings from the nut (up by the tuning pegs) and rub the pencil back and forth in the slots until both slots are completely coated with the pencil graphite. This will lubricate the strings in the slots and help prevent any binding that will pinch the string and not allow the string to move from pitch to pitch.

When the strings are back in the now lubricated notches, and tuned up to pitch, set the tuner to the upper note first. (Always set the upper note first) Lower the string pitch to the lower note and without setting the lower note, bring it back up to the high note that is pre-set. I'll bet it's flat. Loosen the high note stop and re-tune the note. Now, lower the note again and bring it back up to the stop. I'll bet it's

closer if it's not right on. If it is close but not quite on, loosen the high note stop again and tune it again. One trick that helps is to bring the note up to the high note while tuning and setting the stop. Avoid bringing the note down to the right pitch, as this tends to exaggerate the problem of the "sticking nut".

Once you have the high note set and in tune, now lower the note to the desired lower note and set the stop. Bring the note back up to the higher note and then back down. Perhaps it is a little sharp. Loosen the lower stop and retune and set again. This usually puts the lower note in tune. Raise the pitch up to check the high note and lower it to the lower note. Sometimes the high note will be flat again and you will need to start the process all over again. Setting the high note while the lower stop is in place doesn't usually work. It is best to set the high note when the low note stop is not set. However, setting the low note is usually easier and faster than setting the high note on most banjos.

As you can imagine, the amount of graphite in the nut slots makes a big difference when you are sliding a string through constantly like you do with D-tuners. Keep a pencil in your case and keep the slot and the string constantly coated with the graphite. This helps your other strings tune easier too. Even the wound fourth string when you apply the graphite to them as well.