

String Height and Bridge Adjustment

by Brian Calvert

Before adjusting anything make sure your guitar is strung up correctly and tuned to proper pitch! In this particular tutorial measurements are used as a guideline and not a solid fact, you may want to change or adjust these measurements for your own personal playing comfort.

Starting with the High E at the 12th fret and working your way across the fret board to the Low E measure the distance between the bottom of each string and the top of the fret and jot down your measurement on a scrap piece of paper. Looking at these distance's you can now determine what you need to do next.

For most players a string height (also known in guitar slang as action) of 3/64" of an inch is considered normal. Some players choose a higher sting height such as 4/64" of an inch while players which tend to have a light touch and want the fastest action possible strive to lower the action as close as possible to 2/64" which in many case's is very hard to setup and maintain without fret buzzing somewhere on the finger board (for the lowest possible action or to avoid fret buzz all across your finger board it may be necessary to have your frets leveled and crowned first).

Another thing to consider is the fret board radius and your playing style, If you have a fret board with a tight radius such as a common Stratocastor and you tend to bend note's often in the upper register you may want to raise the action slightly higher on the B and G strings to avoid fretting out your note's.

After you have made all of the necessary adjustments to achieve the action you desire you should check your entire neck by fretting each individual note and checking for fret buzz. If fret buzz does occur try to determine the cause and make the necessary adjustments.

Looking at the measurements you have on your scrap piece of paper determine the playing action you desire and if you need to raise or lower all of your strings at once which would mean adjusting the bridge height(if possible depending on your particular bridge style) or if you only need to adjust the height on one or more individual strings. Pictured below are a few of the most common styles of bridges and their adjustment points for this procedure.



Gibson Style Hard Tail Bridge



Floyd Rose Floating Bridge The Bridge height adjustment is achieved by

The bridge height adjustment thumb wheel is actually located beneath the pointed pictured above



Original Strat StyleTremolo Individual string height adjustments can be made by turning the pair of height adjustment screws located on each of the saddles turning each of the two tremolo post's either clockwise to lower the position or counterclockwise to raise the bridge





Special notes to keep in mind

On the Gibson and Floyd Rose style bridges the base plates holding the individual string saddles are generally designed to allow for the radius of the fret board so adjusting individual string height is only possible by placing a shim underneath the individual saddles on the Floyd style and not possible without replacing the blade on the Gibson style which would be a rare thing to do in either case.

On the Original Strat Style Tremolo as well as the Tele Style Hard Tail Bridge you should adjust both height adjustment screws to an equal height of each other on the individual string saddles so that each saddle is situated level (not leaning or angled to the High or Low E side).

If you are working on a guitar with a bolt on style neck and you have determined that the bridge height adjustment will not allow the action to be set up properly down the neck without causing abnormal buzzing when you check, you may need to consider adding a <u>neck shim</u> before adjusting the bridge any further.

On to Step 1: <u>Head Stock Area</u> On to Step 2: <u>Truss Rod and Neck Bow adjustment</u> On to Step 3: <u>Nut Height check and adjustment</u> On to Step 4: <u>String Height and Bridge adjustment</u> (You are here) On to Step 5: <u>Adjusting the intonation of a guitar</u> On to Step 6: <u>Adjusting Pickup Height</u>

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