Note that each time you adjust the saddle location on a given string, you will have to re-tune the open-tuning of that string, since changing the saddle location changes the length of the string, hence changes the frequency of the open string vibration. Retune the string and then repeat this procedure, using the information from the electronic tuner, until the frequency of the fretted note on the 12th string, played normally is exactly in tune with that of the open note on that same string, one octave lower. Then move on to the B string, adjust the bridge saddle for this string to get correct intonation, following the same procedure. Repeat the process for the remaining 4 strings.

When this entire process is completed, the guitarist should be able to play e.g. an E-chord (A-chord) at the bottom of the neck, and an E-barre (A-barre) chord at the 12th fret, and they should now be perfectly in tune with each other. If not, the strings not in tune need to be identified as such, and iterated upon using the above-described procedure.

Playing Notes and Melodies Using Only Harmonics

With the knowledge of where the 2nd, 3rd, 4th 5th & higher harmonics associated with the strings on a guitar are located, it is possible to play melodies using only harmonics, which are interesting/pleasing, due to their bell-like tones and ringing sustain. Doing so requires some practice to perfect this playing technique - it requires one to place one of their playing-hand fingers lightly and momentarily *precisely* at the *node* of that harmonic, while simultaneously picking the string at an *anti-nod*e of that harmonic (in order to maximally excite that harmonic), as shown in the following table.

Harmonic # ***n***	$\beta_{finger} \equiv L_{finger} / L_{scale}$ ***for Node***	$\beta_{pick} \equiv L_{pick} / L_{scale}$ ***for Anti-Node***
1 (Fundamental)	**–**	$^1/_2$
2	**½ (12th fret)**	$^1/_4$
3	$^1/_3$, $^2/_3$ **(7th & 19th frets)**	$^1/_6$, $^3/_6 = ^1/_2$
4	$^1/_4$, $^3/_4$ **(5th & 24th frets)**	$^1/_8$, $^3/_8$
5	$^1/_5$, $^2/_5$, $^3/_5$ **(4th, 9th & 16th frets)**	$^1/_{10}$, $^3/_{10}$, $^5/_{10} = ^1/_2$
6	$^1/_6$ **($3^1/_4$ fret)**	$^1/_{12}$, $^3/_{12} = ^1/_4$, $^5/_{12}$
7	$^1/_7$, $^2/_7$, $^3/_7$, $^4/_7$, $^5/_7$ **($2^3/_4$, $5^3/_4$, $9^3/_4$, $14^3/_4$, 22nd frets)**	$^1/_{14}$, $^3/_{14}$, $^5/_{14}$, $^7/_{14} = ^1/_2$
8	$^1/_8$, $^3/_8$, $^5/_8$ **($2^1/_3$, $8^1/_4$ & 17th frets)**	$^1/_{16}$, $^3/_{16}$, $^5/_{16}$, $^7/_{16}$
9	$^1/_9$, $^2/_9$, $^4/_9$, $^5/_9$ **(2nd, $4^1/_3$, 10th & 14th frets)**	$^1/_{18}$, $^3/_{18} = ^1/_6$, $^5/_{18}$, $^7/_{18}$
10	$^1/_{10}$, $^3/_{10}$ **($1^3/_4$, $6^1/_3$ frets)**	$^1/_{20}$, $^3/_{20}$, $^5/_{20} = ^1/_4$, $^7/_{20}$, **...**

In the above table, the fractional distance, $\beta_{finger} = L_{finger}/L_{scale}$ is defined relative to the <u>*nut*</u>, and the fractional distance, $\beta_{pick} = L_{pick}/L_{scale}$ is defined relative to the <u>*bridge*</u>. These are <u>*exact*</u>. Note that the fret locations listed in the table for the node positions of the harmonics are *approximate* locations. Note also that some nodal positions for certain harmonics may be "missing". This is because they are simultaneously nodal position for lower-order harmonics, the amplitude of which overwhelms that of any higher harmonics, at least to the human ear. Thus only the lowest-order harmonic is really perceived clearly in that nodal location.