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Fretboard Toolbox-Original Mandolin Edition



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# Chord Jig Explained

(Chord Jig shown is from the G Major/E minor page)



### The Basics-

**How are different chords built?** A chord is simply a group of notes played at the same time. The box that says “Chord Type” shows you which columns to use to make various chords, and these columns show you which notes you’ll need to build a desired chord. This box shows you that Major chords are made from notes in the 1, 3, and 5 columns of the Chord Jig. These have “happier” sounds. For example, G Major chords are made of the notes G, B, and D, **which can be played in any order, and each note can be repeated in a chord multiple times.** As long as you are only playing those three notes, then you’re playing a G Major chord! Minor chords are just like Major chords, except they are made of notes from the 1, b3 (read “flat-3”), and 5 columns, and they tend to have “sadder” sounds. To play an A minor chord, you’ll use the notes A, C, and E, etc. To play a D7 chord, a.k.a. Ddom7, notice that you’ll need the notes from the 1, 3, 5, and b7 (read “flat-7”) columns. So, if you can simply cover different frets so that you’re only playing the notes D, F#, A, and C, then you’re playing a D7. It’s pretty easy once you get the hang of it. For even more chord types, see the Chord Toolbox on pp. 17-18.

**Why do certain chords always sound good together?** Major scales (do-re-mi...) sound good to our ears. By going down column “1” of any key’s Chord Jig, you can play the Major scale for that key. The Major scale for G Major, for example, is made of the notes G, A, B, C, D, E, and F#. The secret to understanding which chords sound good together is learning that **each note of the Major scale can be turned into its own chord.** Songs can be played in Major keys (happy sounding overall) or minor keys (sad sounding overall). The bold Roman numerals in the Chord Jig give you the chord numbers for each Major key, and the italicized Roman numerals give you the chord numbers for its relative minor key. Start out with the bold Roman numerals of the Major key, since Major keys tend to be more common than minor keys in popularly played music. This way, if someone says, “Let’s play this song in G Major- it’s a I-IV-V progression”, then you’ll know to play the chords G Major, C Major, and then D Major. You’ll find lots of chord progressions in the boxes below the Chord Jig. If you’re just starting out, try the progressions from the “Some Major Chord Progressions” box; first in one key, then move to others.

### Beyond Basics-

**How do I play in minor keys?** Each page of a Fretboard Toolbox contains a Major, and what’s called its “relative minor” key. Use the italicized Roman numerals from the Chord Jig to see what to call the various chords from any relative minor key. These contain basically the same chords, except in minor keys, the **V chord is often played as a Major chord.** Try the progressions from the “Some E minor Chord Progressions” box below the E minor Chord Jig, and you’ll soon be able to play some common minor chord progressions!

**Can these chord rules be broken?** Once you know the chords that “go together” within a key, see what happens when you break the rules! In the chord progression boxes, **all of the chords that “break the rules” are shown in bold.** There’s lots of ways to break chord rules- some Major key examples include making the iii chord a Major chord (III), flattening the vii (bVII), playing a IV (Major) and then playing it as a iv (minor), etc. When you know the rules you’re breaking, you can get that sound any time, and in any key you choose!

Chord Names and Roman Numerals: Major / relative minor	Use notes from these columns to build any chords I- vii° from the key of G Major, and any chords i- VII from the key of E minor.										
	1	(2)	b3	3	(4)	b5	5	(6) bb7	b7	7	
<b>G MAJOR (G)</b> I / III	G			B			D		F	F#	
<b>A minor (Am)</b> ii / iv	A		C				E		G		
<b>B minor (Bm)</b> iii / v	B		D				F#		A		
<b>C MAJOR (C)</b> IV / VI	C			E			G		Bb	B	
<b>D MAJOR (D)</b> V / VII	D			F#			A		C	C#	
<b>E minor (Em)</b> vi / i	E		G				B		D		
<b>F# diminished (F#dim)</b> vii° / ii°	F#		A			C		Eb	E		

## Chord Jig

Chord Type	Use notes from columns
Major-----	1,3,5
7, dom7-----	1,3,5,b7
Major7, Maj7-----	1,3,5,7
minor-----	1,b3,5
min7, m7-----	1,b3,5,b7
dim-----	1,b3,b5
½ dim, °, m7b5---	1,b3,b5,b7
dim7, °7-----	1,b3,b5,bb7



# Fretboard Layout Explained



## The Basics-

**How is a mandolin fretboard laid out?** The notes to the left of the nut (see diagram) are the notes of each pair of open (unfretted) strings. The top strings (#4) are tuned to "G", and bottom strings (#1) to "E". Frets numbers are labeled at the top- notice that the notes on the 2nd fret of the 4- strings are "A's". You can find any note on the fretboard by looking at both the fret and string numbers!

**Why learn notes all over the fretboard?** Instructors often talk about the importance of learning your fretboard all up and down the neck. This is often a point of frustration for people learning an instrument, because even if you memorize the notes all over the fretboard, you often still don't know *why* you needed to learn all of those notes. However, if you understand that G Major chords are built from the notes G, B, and D, AND KNOW THAT THOSE NOTES CAN BE PLAYED IN ANY ORDER, then you can build chords anywhere! Use this book along with some chord charts to start seeing why **any given chord can be played in so many different ways all over the fretboard.**

## Beyond Basics-

**Why are some notes missing on the Pentatonic Jig of each page?** The Pentatonic Jig only shows the notes that are found within the Major and relative minor key of a given page. For example, in the key of G Major, the Pentatonic Jig only shows the location of the notes, G, A, B, C, D, E, and F#. Lots of 7 chords, and other fancier chords, contain notes that are not found in that song's key, and therefore don't appear in the Pentatonic Jig. For example, if you're playing in the key of G Major, and you want to play a C7, you need to know where at least one Bb note is found to add it to your C chord- just use the Fretboard Layout if you're not sure where to find that note. Also, lots of songs contain chords that are not directly part of the Major or minor key you're playing in. For example, a song in the key of G Major may contain a chord such as B Major, instead of B minor. Since B minor chords have B, D, and F# notes, you will need to be able to find where you can change any "D" notes from the B minor chord into "D#" notes to change it into a B Major chord. If you're unsure, just use this Fretboard Layout to see where those "D#" notes are found, since they're not in the Pentatonic Jig of the G Major page.

**What's a good way to memorize my entire fretboard?** There are 12 notes found multiple times each all over the fretboard, which makes memorizing the entire fretboard (even just up to the twelfth fret) a daunting task. You can simplify the task of fretboard memorization greatly if you start by memorizing the location of just the C, D, E, G, and A notes, on each string, all the way to the twelfth fret. If you look at the Pentatonic Jig on the C Major, E minor page of your Fretboard Toolbox, then you can see that the five notes listed above are all contained in white boxes. (These notes are the five notes of the C Major and E minor pentatonic scales). Memorize the locations of these five notes, all over your fretboard, paying close attention to how many frets are found between each of them. **Once you can find these five notes everywhere, then every other note you could play is just one fret to the left or right of a note you already know!** Once you can find these five notes everywhere, then every other note you could play is just one fret to the left or right of a note you already know! Notes with a sharp (#) are higher pitched than corresponding notes without a sharp- "A#" notes are higher pitched than "A" notes. Conversely, flat notes (b) are lower pitched- an "Ab" note is lower pitched than an "A" note. So if you're looking at the "A" notes on the 5th fret of the 1-strings then you can see that the "Ab" notes are just to the left (4th fret), and the "A#" notes are just to the right (6th fret). If you look at the "G" notes on the 3rd fret of the 1-strings, you'll see that if you play "G#" notes (on the 4th fret), instead of "G's", this puts you on the same fret as the "Ab" notes. **This is why single frets can have two note names on them!** Again, if you memorize the notes C, D, E, G, and A on your fretboard, using your C Major/A minor Pentatonic Jig to help, then no other note is any farther than next door to a note you already know well! (NOTE: The B, C, E, and F notes are larger than their counterparts, even though they are essentially the same note, just to make this at least slightly easier to read). ☺

Fret #:		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	E	F	F#	G	G#	A	A#	B	C	C#	D	D#	E	F	F#	G	G#	A
	Fb	E#	Gb		Ab		Bb	Cb	B#	C#	Db	Eb	Fb	E#	Gb		Ab	
	A	A#	B	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C	C#	D
	Bb	Bb	Cb	B#	Db		Eb	Fb	E#	Gb		Ab	A	A#	Bb	Cb	B#	Db
2	D	D#	E	F	F#	G	G#	A	A#	B	C	C#	D	D#	E	F	F#	G
	Eb	Eb	Fb	E#	Gb		Ab	A	A#	Bb	Cb	B#	Db	Eb	Fb	E#	Gb	
3	G	G#	A	A#	B	C	C#	D	D#	E	F	F#	G	G#	A	A#	B	C
	Ab	Ab	A	A#	Bb	Cb	B#	Db	D	Eb	Fb	E#	Gb	G	A#	Bb	Cb	B#



# Pentatonic Jig Explained

(Pentatonic Jig shown is from the G Major/E minor page)



### The Basics-

**How does the Pentatonic Jig help me build chords?** Just pick the notes for the chord you want using the Chord Jig, and then find those notes grouped close enough to play together on the Pentatonic Jig. e.g. G Major chords are played with the notes G, B, and D, so a simple G Major chord can be played with the “G” notes played open (no frets, since they’re already notes you want) on the 4-strings, “D” notes played open on the 3-strings, “B” notes played on the 2nd fret of the 2-strings, and “G” notes played again on the 3rd fret of the 1-strings. One way to play an A minor chord, made of A, C, and E notes, is to play the “A” notes on the 2nd fret on the 4-strings, “E” notes on the 2nd fret of the 3-strings, “C” notes on the 3rd fret of the 2-strings, and “A” notes again on the 5th fret of the 1-strings. **You can build any chord you want in this same way!** Chords are much easier to learn when you know *why* you’re using certain frets, and not simply memorizing positions that have no meaning. This is exactly why I created the Fretboard Toolbox method!

**How does the Pentatonic Jig help me solo?** Pentatonic scales (five-note scales) are extremely versatile! They can be played in Major pentatonic (happier-sounding) or minor pentatonic (sadder, darker-sounding) versions. The notes of a G Major pentatonic scale are G, A, B, D, and E. The notes of the E minor pentatonic are the exact same, except they are grouped as E, G, A, B, and D. **For each Major and relative minor key, these notes are contained in white boxes on the Pentatonic Jig.** Lots of songs in Major keys sound great when you solo with the Major pentatonic scale. Try having someone play a I-IV-V progression in G Major (G Major-C Major-D Major), and try soloing with the G Major Pentatonic scale. (Keep coming back to the notes in the “Major Pentatonic Roots” boxes, and it should sound great).

**Some songs in Major keys also sound great when you use the *minor* pentatonic scale for soloing.** In the key of C Major, have someone play a I-bIII-IV progression (C Major-E Major-F Major) and try soloing with the **C minor pentatonic** scale from the Eb Major/Cb minor page. Keep coming back to the “C” note from the “Minor Pentatonic Roots” box and you’ll get a really cool, dark sound. For a chord progression in E minor, have someone play a *i-v-i* progression (E minor-B minor-E minor), and use the E minor pentatonic scale from the G Major/E minor page. Keep coming back to the “E” note from the “Minor Pentatonic Roots” box to make a great, sad sounding solo.

### Beyond Basics-

**How do I play up the neck?** Use the Chord Jig to find the chord notes you need, and then use the Pentatonic Jig to find them grouped close enough to play, anywhere your fingers will stretch, so that you’re only covering the notes you want! Find some chord charts online, and use the Chord Jig and Pentatonic Jig together to see why the charts show so many different positions for each chord. Once you get the hang of it, pick some chord progressions to play, and then see how little you can move your hand when moving from chord to chord.

**How do I add more flavor to the pentatonic scales?** For Major keys, add the underlined notes to the notes in the white boxes and you’re playing the whole Major scale. The melodies of countless songs use countless variations of the seven notes of any Major key! In the key of E minor, try playing all the notes from the Pentatonic Jig, except change all the D’s to **D#’s**. So just play E, F#, G, A, B, C, **D#**, then back to “E”. The “D#” leads back to the “E”, and makes a scale called the harmonic minor scale. The cool sound of this “D#” note is why the V chord of a relative minor scale (the B chord in the key of E minor) is often played as a **Major** chord- notice the “D#” note in a B Major chord. (Bm = B, D, F#; B Major = B, **D#**, F#). **The more you study the Pentatonic Jig for each key, the more cool things you’ll discover!**

Pentatonic Jig for G Major and E minor																	
Fret #:	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	E	F#	G	A	B	C	D	E	F#	G	A	B	C	D	E	F#	G
2	A	B	C	D	E	F#	G	A	B	C	D	E	F#	G	A	B	C
3	D	E	F#	G	A	B	C	D	E	F#	G	A	B	C	D	E	F#
4	G	A	B	C	D	E	F#	G	A	B	C	D	E	F#	G	A	B

Major Pentatonic Roots: For songs in G Major

Minor Pentatonic Roots: For songs in E minor