Method 2 — The Chord Tone Gap Method

By James Hober

Ted Greene created the V-System using Method 1 in the 1970s. In the 1980s, I discovered a pattern of chord tone gaps inherent in Ted's V-System. I wrote a few pages describing my findings, showed them and explained them to Ted at my next lesson, and let him photocopy them. His later personal notes show that he intended to credit me for my work and offer me a royalty from his forthcoming book about the V-System. Ted never wrote his V-System book. Since we have no first-hand account from Ted (other than a few cryptic, personal pages), I am doing my best in these chapters to elucidate his V-System.

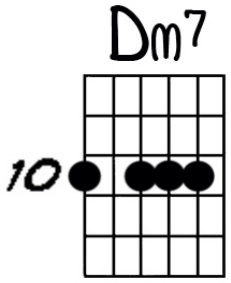
In this chapter, you will learn about the method that I created and showed to Ted. Ted named it "Method 2 – the Chord Tone Gap Method."

Method 2 is very simple. To classify a chord, we count how many chord tones can fit in the gap between the bass and tenor, the gap between the tenor and alto, and the gap between the alto and soprano. Then we look it up in...

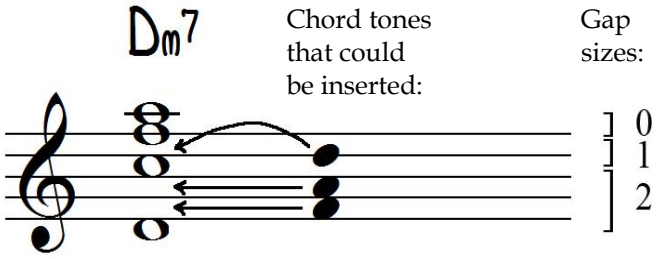
The Chord Tone Gap Table

	B – T	T – A	A – S
V-1	0	0	0
V-2	1	0	1
V-3	0	1	2
V-4	2	1	0
V-5	1	2	1
V-6	4	0	0
V-7	5	0	1
V-8	2	2	2
V-9	1	0	5
V-10	1	4	1
V-11	2	1	4
V-12	4	1	2
V-13	0	4	0
V-14	0	0	4

Let's Try an Example:



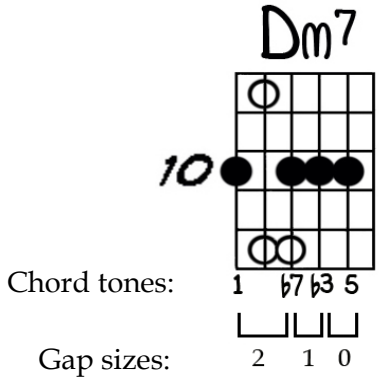
The chord tone gaps are quite clear in staff notation:



It's also possible to illustrate the chord tone gaps with a diagram. We write out the four chord tones in ascending order, repeating the sequence as needed. Then we indicate the voices, low to high (bass, tenor, alto, soprano), above their corresponding chord tone:

Voices:	Bass			Tenor		Alto	Soprano
Notes:	**D**	F	A	**C**	D	**F**	**A**
Chord tones:	**1**	b3	5	**b7**	1	**b3**	**5**
Gap sizes:		2			1		0

With a fretboard grid, the chord is indicated with solid dots as usual. The tones that can fit in the gaps are indicated with circles. The dots and circles together form an arpeggio that can be played from the lowest note in the chord to the highest. Then gap size is simply the number of circles played between the solid dots:



Whether we use staff notation, a diagram, or a fretboard grid, we count how many chord tones fit in the gaps between adjacent voices. For our Dm7, between the bass (the root) and tenor (b7), we can insert two chord tones (b3 and 5). That's a gap size of two. Between the tenor (b7) and alto (b3), we can insert one chord tone (the root). That's a gap size of one. And between the alto (b3) and soprano (5), we cannot insert any chord tones. That's a gap size of zero.

We have found the following chord tone gap sizes in our Dm7 chord: **2 1 0**. We look **2 1 0** up in the Chord Tone Gap Table and find that we have a V-4.

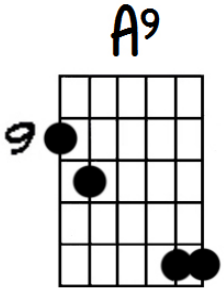
Two Caveats

Please be careful about the following two points:

1. "Chord tone" means one of the four distinct tones making up the chord, for the purpose of determining gap size in Method 2. It does **not** include any **omitted** tones from the chord. So if we have an A9 no root, we don't count the root in the gaps. We only count how many times an actual note present in the chord, in this case 3, 5, b7, or 9 (the notes C#, E, G, or B), can fit into each gap.

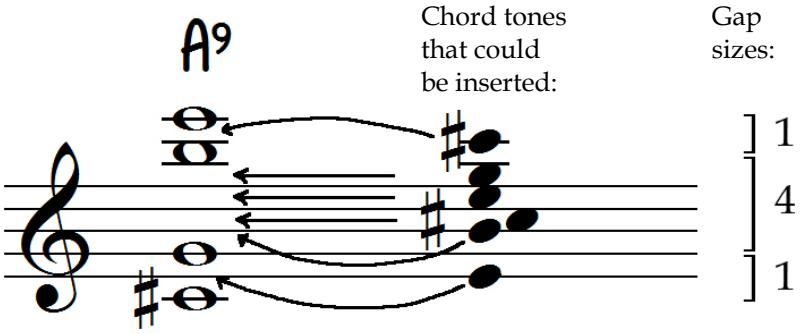
2. Remember that 9 and 2 are equivalent, 11 and 4 are equivalent, and 13 and 6 are equivalent. Therefore, a ninth can fit into a gap between a root and a third. An eleventh can fit into a gap between a third and a fifth. And a thirteenth can fit into a gap between a fifth and a seventh.

Another Example to Underscore These Two Points:



The example A9 omits the root, so we won't count chord tone 1 in the gaps. We will count only the chord tones actually present: 2, 3, 5, and b7.

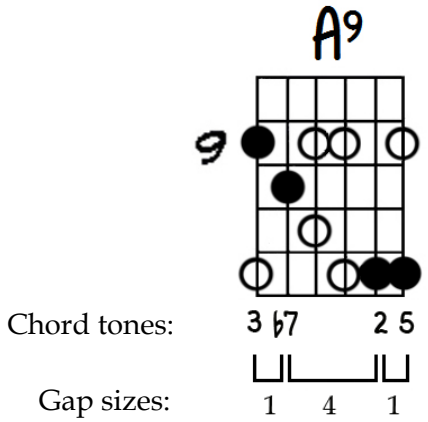
Let's look at the staff notation:



Here's the diagram:

Voices:	Bass		Tenor					Alto		Soprano
Notes:	**C#**	E	**G**	B	C#	E	G	**B**	C#	**E**
Chord tones:	**3**	5	**b7**	2	3	5	b7	**2**	3	**5**
Gap sizes:		1			4				1	

And here's the fretboard grid, with solid dots indicating the chord and circles indicating the additional arpeggio notes that fit in the gaps. (The arpeggio doesn't include the root because it is omitted from our A9 chord.):



We have a chord tone gap size of one between the bass and tenor, a gap size of four between the tenor and alto, and a gap size of one between the alto and soprano. We look up **1 4 1** in the Chord Tone Gap Table and find that our A9 chord is a V-10.

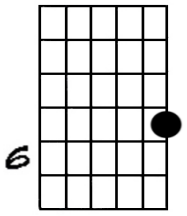
Building with the Chord Tone Gap Method

Building a chord with Method 2 is also straightforward. "Spacing a chord" is a good way to say it since Method 2 emphasizes the gaps between the voices. To space a chord from the bass up, read the gap sizes in the table from left to right. To space a chord from the soprano down, that is, with a melody note in mind, read the gap sizes in the table from right to left. That way you begin with the gap between the soprano and alto.

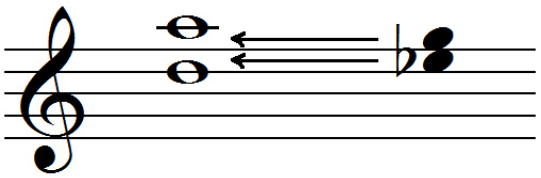
Let's space a V-3 Ebmaj7#11 with #11 in the soprano. The chord formula is 1, 3, 5, 7, #11. To get a four note chord, we'll have to omit one of the chord tones, so let's leave out the fifth. In ascending order, that leaves us 1, 3, #4, and 7 (the notes Eb, G, A, and D).

According to the Chord Tone Gap Table, the gap sizes for V-3 are **0 1 2**. We'll read this right to left to create a gap size of **2** between the soprano and alto, of **1** between the alto and tenor, and of **0** between the tenor and bass.

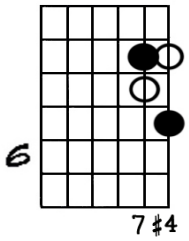
We'll begin with the note A, the #11 (#4), in the soprano:



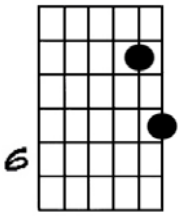
To find the alto, we need to create a gap below the soprano that can hold two chord tones. Which two? The two tones below #4 in our ascending list: 1, 3, #4, 7. So chord tones 1 and 3 fit in this gap:



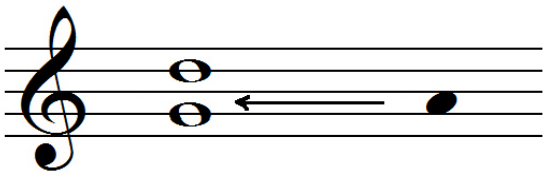
Alto			Soprano
D	Eb	G	**A**
7	1	3	**#4**



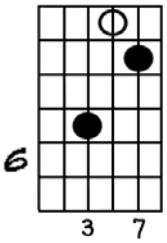
The gap of size two that we created places the 7 (the note D) in the alto. Here's the chord we've built so far:



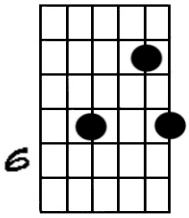
Next we need a gap between the alto and tenor that can hold one chord tone. The #4 fits in this gap:



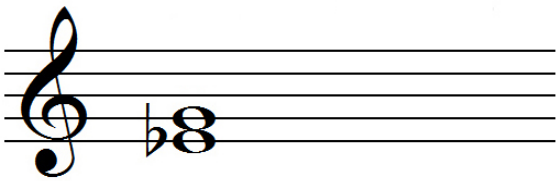
Tenor		Alto
G	A	**D**
3	#4	**7**



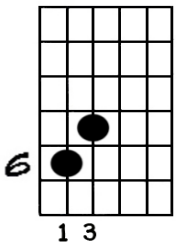
The gap of size one that we created places the 3 (the note G) in the tenor. We now have the top three notes of our chord:



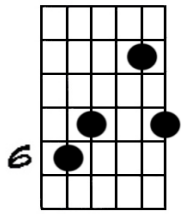
Finally, we need a gap between the tenor and bass that holds zero chord tones. That simply means that we proceed directly to the next lower chord tone and leave no gap.



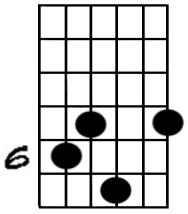
Bass	Tenor
Eb	**G**
1	**3**



Placing the root (the note Eb) in the bass gives us the completed chord:

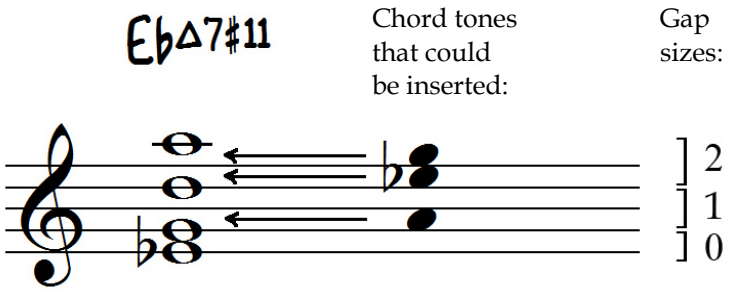


We have built a V-3 Ebmaj7#11. But it would be more comfortable to finger if we moved the D over from the second string to the third string:



(If we had remembered that 5-4-3-1 is a *natural string set* for V-3, we could have targeted these strings from the beginning.)

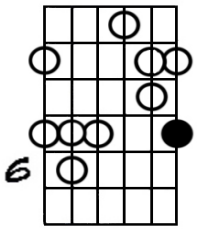
We figured out the notes in the Ebmaj7#11 above one by one. And that's a good way to do it. But if you prefer, you can write staff notation at the start for the entire chord, calculating from the soprano down:



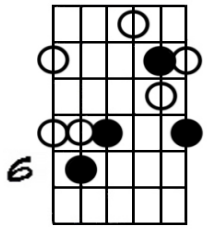
Or, at the start you can diagram the entire chord, figuring out the gaps right to left, from the soprano down:

Voices:	Bass	Tenor		Alto			Soprano
Notes:	**Eb**	**G**	A	**D**	Eb	G	**A**
Chord tones:	**1**	**3**	**#4**	**7**	1	3	**#4**
Gap sizes:	0		1		2		

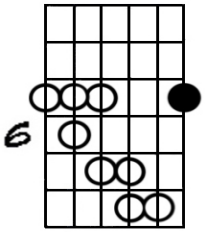
Or, on a fretboard grid you can draw an arpeggio descending from the soprano in circles. The arpeggio must use only the four tones in the chord (no omitted tones):



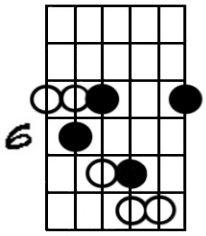
Then fill in those circles that actually constitute the chord. The soprano is already a solid dot. Next, skip down two arpeggio notes to create a gap size of two. Darken the alto. Skip down one arpeggio note to create a gap size of one. Darken the tenor. The next gap size is zero so darken the next lower arpeggio note to get the bass:



Here's the same approach, a little higher up the neck:



with the resulting chord:



With practice, you won't have to write anything down: staff notation, diagram, or fretboard grid. You'll be able to recognize or build any four note chord just by thinking about which chord tones get skipped in the gaps.

What's Next?

You now understand how to use Method 2 to recognize and build chords. Take Quiz #3 to practice recognizing a chord's voicing group. Take Quiz #4 to challenge yourself with building one chord for each voicing group.

Want a deeper understanding of Ted's V-System? Read *Method 2 — Further Insights* to — dare I say it? — bridge the gap.

—James

Special thanks to Paul Vachon. In all these chapters he is providing outstanding graphics and giving me feedback as I write. In this chapter, he also came up with the fretboard grid and arpeggio approach, a very important way of visualizing the Chord Tone Gap Method.