



The Tritone substitution

In Chords on August 8, 2012 at 10:01 am

from Alfred Scoggins (Wholenote web site) Tempo: 120

In chordal playing there are several substitution rules one can apply. One of these is the tritone substitution. This substitution is used a lot in jazz although it's not confined to jazz. This lesson will show you how and where to apply it.

The word tritone means three tones. If you take any note and then move 3 whole tones either up or down it will bring you to another note.

Let's take the note **G**. Three whole tones up from that leads you to **Db** – i.e. G – A – B – Db.

It works the same (which is quite interesting) going down as well: G – F – Eb – Db.

G and Db are said to be tritones of each other

This substitution is used with dominant chords. In the simple 2-5-1 progression Dm7 – G7 – CM7 the dominant chord is G7 and it can be substituted with a Db7.

Very often the straightforward 7th chord is used. Technically, however, the correct chord to use is a **7b5** chord.

Here are examples of these sounds. Note the difference.

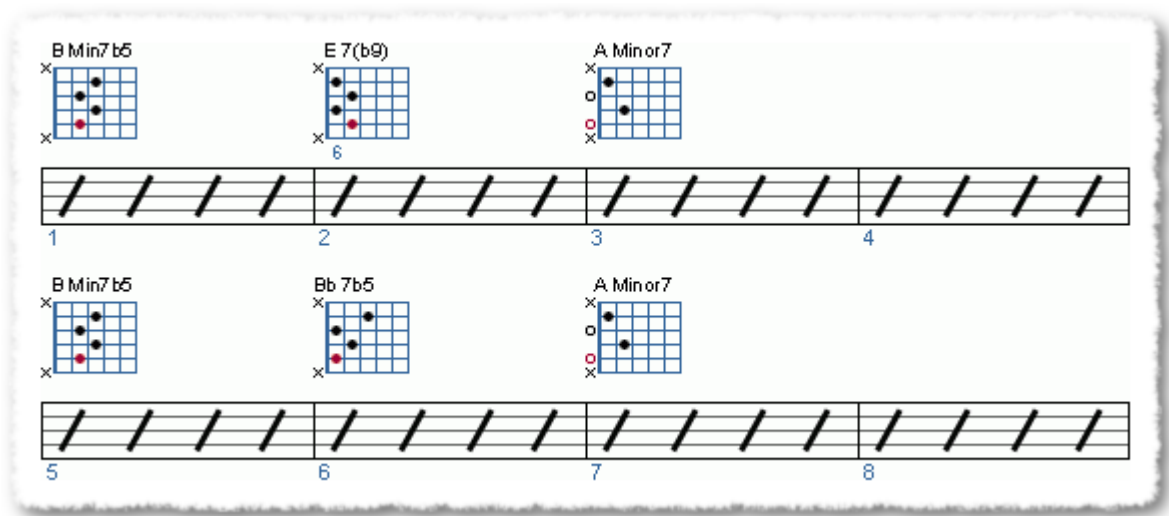
The diagram illustrates the tritone substitution in a 2-5-1 progression. It is organized into three rows, each representing a different dominant chord substitution for the G7 chord in a Dm7-G7-CM7 progression.

- Row 1:** Shows the standard progression: D Minor7 (fret 5), G7 (open), and C Major7 (fret 5). The G7 chord is the dominant.
- Row 2:** Shows the substitution of G7 with C#7 (fret 4). The progression is D Minor7 (fret 5), C#7 (fret 4), and C Major7 (fret 5). The C#7 chord is the dominant.
- Row 3:** Shows the substitution of G7 with C#7b5 (fret 4). The progression is D Minor7 (fret 5), C#7b5 (fret 4), and C Major7 (fret 5). The C#7b5 chord is the dominant.

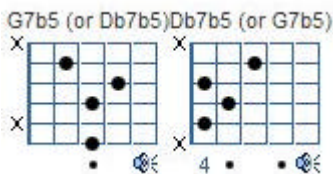
Each chord diagram is a 6-string guitar fretboard with notes indicated by black dots and red dots for the root. The staves show the chords played in a sequence.

The same idea is also used in a minor 2-5-1.

For example: Bm7b5 – E7(b9) – Am7 becomes Bm7b5 – Bb7b5 – Am7.

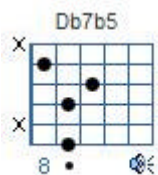


Despite the chord shapes shown by Groove Builder the usual shapes used on a guitar are these:

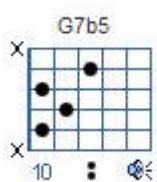


You'll see I've put two names for each 7b5 chord. This is because a 7b5 chord has two possible roots although usually the bass note is considered the root. The notes of the chord are exactly the same in both cases although in a different order.

The notes of the G7b5 above, played at the 2nd fret, are G, F, B, Db. If you slide that same chord up to the 9th fret (so Db is the bass note) the notes change places and become Db, B, F, G:



You can see also here that you can play the Db7b5 at the 4rd fret where the notes are Db, G, B, F. In the same way the G7b5 could also be played at the 10th fret where they become G, Db, F, B.



So you can see these two shapes are interchangeable. Which one you use depends on which is nearest or what sound you prefer.

Used properly the tritone substitution can be highly effective.

In this progression, for example, one could easily substitute tritones in both the minor and major 2-5-1's.

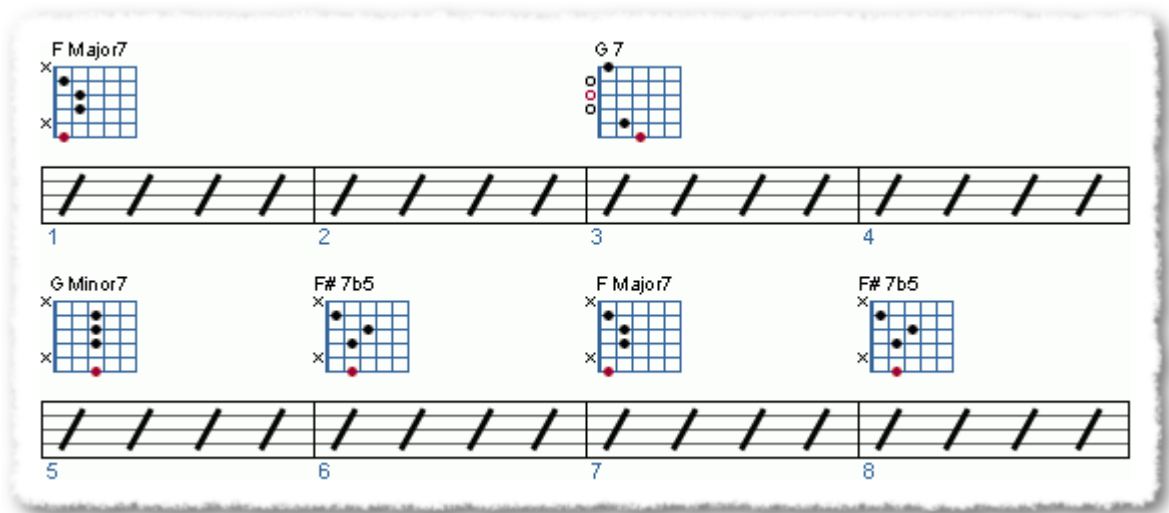
The diagram illustrates 16 guitar fretboard diagrams for various chords, arranged in four rows of four. Each diagram includes a chord name, a fretboard grid with notes, and a corresponding guitar staff with a slash indicating a barre. The chords are:

- Row 1: C Minor7, F7, Bb Major7, Eb Major7
- Row 2: A Min7 b5, D7(b9), G Minor
- Row 3: C Minor7, B7b5, Bb Major7, Eb Major7
- Row 4: A Min7 b5, Ab7b5, G Minor

The fret numbers 1 through 16 are indicated below each staff.

The tritone is frequently used in Bossa tunes. Very often the composer knows they sound good so it's done for you!

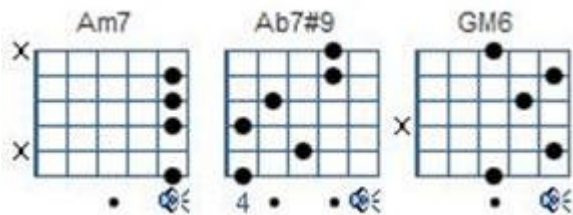
In this progression the F#7b5 is substituted for C7.



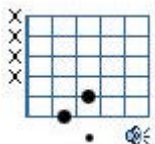
One good trick you should know is that, in Swing tunes, a **7#9** chord is often used instead of the 7b5.

So instead of, say, Am7 – D7 – GM6 you could play Am7 – Ab7#9 – GM6.

You play it like this. Experiment with it and you'll see how effective it is (click these chord shapes).

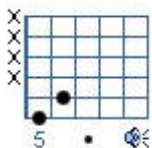


It's very easy to find a tritone on a guitar. Look at this diagram:



The note on the 5th string is C and the note on the 6th string is F#. They are tritones of each other. That shape can be moved anywhere you like up the board.

The lowest you can go is the open 6th string E and Bb on the 5th string. You need only go to A on the 6th and Eb on the 5th to include all possible notes.



If you know your notes on the board you'll easily find the tritone you want. After a while you get to know them anyway.

We said at the start that, technically, the proper chord to use is a 7b5 but one can use the ordinary dom7s as well. It's often done.

Take a 12-bar blues. The straightforward chords are usually 'jazzed up' by playing 13ths, 9ths and #9s like this:

The diagram illustrates a 12-bar blues progression with the following chords and fret positions:

- Bar 1: G7(13) at fret 1
- Bar 2: C7(9) at fret 2
- Bar 3: G7(13) at fret 3
- Bar 4: G7(13) at fret 4
- Bar 5: C7(9) at fret 5
- Bar 6: C7(9) at fret 6
- Bar 7: C# Dim7 at fret 7
- Bar 8: G7(13) at fret 8
- Bar 9: D7(9) at fret 9
- Bar 10: C7(9) at fret 10
- Bar 11: G7(13) at fret 11
- Bar 12: E7(#9) at fret 6, A7(13) at fret 5, D7(#9) at fret 4

That could be played with tritones like this.

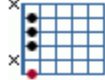
You might notice that Groove Builder very kindly slides some of these chords down into the next one for us! For example, just before the C9 it plays a C#9... which is the tritone of G. It saves me having to write in G13/Db9 – C9.

When you slide a chord into the next one like that you're automatically playing a tritone substitution.

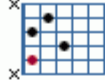
There's a very nice slow blues that goes like this. This one was actually composed using a tritone – in this case Ab7 instead of D7. You might recognize it. Clapton's version is popular. Something to do with having a hard time 😊

Incidentally, it doesn't matter what kind of chord you use in a tritone substitution. They can be altered or not. Here's the first 16 bars of a well-known standard. On the next page we'll do some substitution.

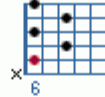
F Minor7



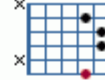
Bb Minor7



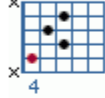
Eb 7



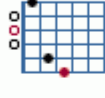
Ab Major7



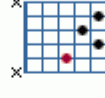
C# Major7



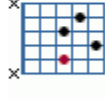
G 7



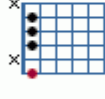
C Major7



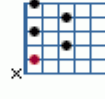
C Minor7



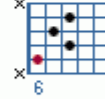
F Minor7



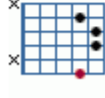
Bb 7



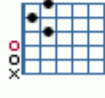
Eb Major7



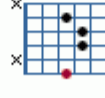
Ab Major7



D 7



G Major7



Here's a substituted version. It's a bit extreme but it makes the point.

The diagram displays 16 guitar fretboard positions, each with a chord name, a fretboard diagram, and a corresponding guitar staff with a slash indicating a barre. The positions are numbered 1 through 16:

- 1: F Min7(9)
- 2: Bb Minor7
- 3: A 7(b13)
- 4: Ab Major7
- 5: C# Maj7(9)
- 6: C# 7b5
- 7: C Major7
- 8: C Minor7
- 9: F Min7(9)
- 10: E 7(b9,b13)
- 11: Eb Maj7(9)
- 12: Ab Major7
- 13: Ab 7(b9,13)
- 14: G Major7
- 15: G Major7
- 16: G Maj7(13)

Then there's the question of what to play over these tritone substitutions but that'll have to be another lesson.

Good luck with it anyhow. It's not that difficult because tritones are basically chromatic – like Dm7 – Db7 – CM7 and so on. Not very hard to find.

