

Tritone Substitutions, Tritone Sub Chains, and “Extended” Tritone Subs

A **tritone substitution** is the substitution of one resolving dominant chord for another whose root is a tritone (augmented 4th/diminished 5th) away. In C major, an example would be taking a regular ii-V-I progression (Dmi7→G7→Cma7) and replacing the G7 chord with a Db7 chord (Db is a tritone away from G). This works because the 3rd and 7th of the G7 chord – B and F, respectively) – are the same notes as the 7th and 3rd of the Db7 chord (allowing for the enharmonic spelling of the Cb as a B). The root of the chord changes, but the guide tones remain the same. So:

Dmi7→G7→Cma7 becomes Dmi7→Db7→Cma7

When analyzing a progression with roman numerals, the most common label used to show a tritone substitution is to replace the original “V7” with the designation “subV7”, as in the example below.

Chord progression: D-7, G7, CΔ, D-7, Db7, CΔ

Roman numerals: II, V7, I, II, subV7, I

A **tritone sub chain** is what happens when a chord sequence that began as a series of dominant chords resolving by 5th:

(i.e. – E7→A7→D7→G7→Cma7)

employs tritone subs on every other chord to make the root motion chromatic without changing the guide tones or function of the chords:

(i.e. – E7→Eb7→D7→Db7→Cma7)

Chord progression: E7, A7, D7, G7, CΔ, Eb7, D7, Db7, CΔ

An **extended tritone sub** is an extrapolation of the tritone sub concept where a related ii chord is attached to the subV chord to insert a side slipping ii-V progression into a place where the original progression only had a regular V7-I progression. In the case of the original ii-V7-I in C:

Dmi7 → G7 → CMa7

becomes

Dmi7 → Abmi7 Db7 → CMa7

The image shows two musical phrases in piano style. The first phrase consists of four measures: D-7, Db7, CΔ, and D-7. The second phrase also consists of four measures: D-7, Ab-7, Db7, and CΔ. A bracket underlines the Ab-7 and Db7 chords in the second phrase, with the label 'SUBV7' written below it.

It is not uncommon for jazz improvisers to apply the same logic above to the concept of tritone sub chains, producing an effect that we will call an **extended tritone sub chain**. The principle is easily illustrated by the first four bars of the standard “I Can’t Get Started”:

The image shows the first four bars of the standard "I Can't Get Started" in piano style. The chords are CΔ, A-7, D-7, G7, E7, A-7, D7, G7, and CΔ. The bass line shows a descending line of chords: A-7, D-7, G7, E7, A-7, D7, G7, and CΔ.

One common reharmonization of bars 3 and 4 of this tune replaced the harmonic motion in these bars to a series of descending extended tritone substitutions leading to the CMa7 resolution chord:

The image shows the first four bars of "I Can't Get Started" with a reharmonization. The chords are CΔ, A-7, D-7, G7, B-, E7, Bb-, Eb7, A-, D7, Ab-, Db7, and CΔ. The bass line shows a descending line of chords: A-7, D-7, G7, B-, E7, Bb-, Eb7, A-, D7, Ab-, Db7, and CΔ.

While this practice is common in jazz both as an improvisational and arranging device, it should be noted that indiscriminate usage of this device can easily create harmony that clashes with the melody of the song, as in bars 3 and 4 the previous example:

B- E7 Bb- Eb7 A- D7 Ab- Db7 CΔ

The image shows a musical score with two staves. The top staff contains a melodic line with three pickup notes (quarter notes) leading into a C major chord (CΔ). The bottom staff contains a complex harmonic accompaniment with various accidentals (sharps, flats, and naturals) and a tritone sub chain structure. The notes in the bottom staff are: B- (Bb), E7 (Eb), Bb- (Bbb), Eb7 (Ebb), A- (Ab), D7 (Db), Ab- (Abb), Db7 (Dbb), and CΔ (C).

Note how the three melodic pickup notes leading into the C major resolution are in direct conflict with the superimposed harmony created by the extended tritone sub chain. Whether this is an acceptable outcome or not is a subjective matter, but it is good for each player to decide for themselves whether they want to accept the resulting melodic dissonance this sort of reharmonization creates in this instance.