

DIMINISHED HARMONY

Covered in this chapter:

- DIMINISHED SCALES REVIEW
- DIMINISHED CHORD "FAMILIES"
- DIMINISHED CHORD STRUCTURES INCLUDING EXTENSIONS
- DIMINISHED CHORD FUNCTIONS IN CHORD PROGRESSIONS

DIMINISHED SCALES REVIEW

The two forms of diminished scales are shown below:

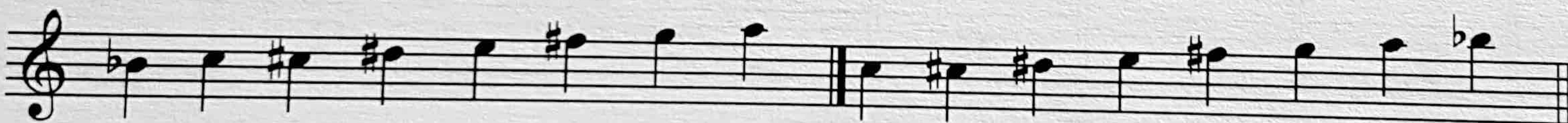
Whole-step/half-step
diminished scale

Half-step/whole-step
diminished scale



Some important things to note:

- Both forms of the scale contain the same notes so that one is merely a mode of the other.
- Unlike most scales, which contain seven notes, diminished scales contain eight notes.
- The scales are symmetrical, repeating at the interval of a minor third. Because of that, there are only three different groupings of the eight notes in each form of the scale. (Compare the example below to the one above. You will notice that the notes of the scale are the same even though both scales begin a minor third up from the original example).



Exercise 1. On separate manuscript paper:

- 1) Write out D, Gb, and Bb whole/half diminished scales.
- 2) Write out Gb, E and F half/whole diminished scales. Which scales in 1) and 2) contain the same notes?

DIMINISHED CHORD "FAMILIES"

Diminished seventh chords are made up of four notes all a minor third apart (1, b3, b5, bb7). In terms of sound, there are only three diminished chords, not counting inversions. To explain this, below is a G diminished chord. To simplify reading, the top note is written as an "E" rather than as an "F flat". Notice also that Db is written as a C#. In diminished harmony, enharmonic spellings can be freely interchanged.



The previous chord contains the same notes as three other diminished chords, namely $B\flat^{o7}$, $C\sharp^{o7}$ ($D\flat^{o7}$), and E^{o7} ($F\flat^{o7}$). By placing those chord roots in the bass, we spell out each of the chords, even though the top notes don't change.

By adding different bass notes, this same group of diminished chords becomes a set of dominant chords. The new bass notes are also a minor third apart and they related to the diminished chords in that they are part of the same diminished scale (starting on G the roots are G, A, $B\flat$, C, $C\sharp$, $E\flat$, E and $F\sharp$, or a G whole/half diminished scale). Notice that placing a bass note a major third below a diminished chord creates a dominant chord. That is a common method, but placing a bass note a half-step below, a major second above, a fourth above, etc. also creates a dominant chord.

Notice that the chords are diminished seventh chords a minor third apart and dominant seventh chords a minor third apart. Diminished chords and dominant chords are the two types of chords typically associated with diminished scales.

The whole/half diminished scale contains the chord tones of a diminished seventh chord.

The half/whole diminished scale contains the chord tones of a dominant seventh chord.

Since the scales are symmetrical and they contain the same notes, the two scales above are compatible with all eight chords listed above. This grouping can be referred to as a “family” of chords, which are tied to the same scale(s). There are only two other “families” of chords. Below is the second “family”.

This is the third “family” of chords:

Exercise 2. On separate manuscript paper, write out the seven possible diminished seventh and dom. ^{7(b9)} substitutes (from the diminished chord “families”) for the following chords:

F^{°7}, F^{7(b9)} and E^{°7}

DIMINISHED CHORD STRUCTURES INCLUDING EXTENSIONS

The numbers for a diminished seventh chord are:

1, $\flat 3$, $\flat 5$, 6 (6 is enharmonically the same as $\flat \flat 7$ and usually easier to read in a chart)

The extensions for a diminished seventh chord are:

7, 9, 11, $\flat 13$

The extensions form a second diminished chord, and combined, these two diminished chords form a diminished scale!

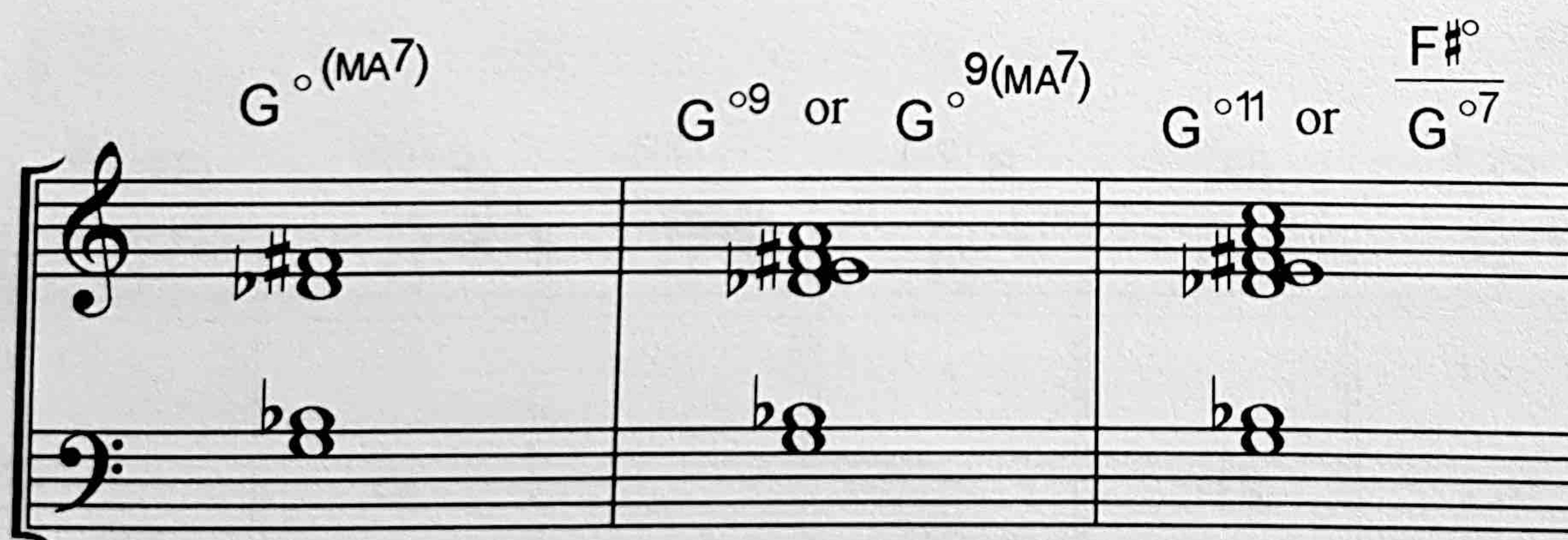


The extensions form an F# diminished seventh

The bottom four notes form a G diminished seventh chord

This chord contains all the notes from the G, B \flat , D \flat , and E whole/half diminished scales and F \sharp , A, C, and E \flat half/whole diminished scales

Using a slash chord symbol for the chord above is probably the easiest way to convey its meaning. Below are some other chord symbols for extensions up to the eleventh.



DIMINISHED CHORD FUNCTIONS IN CHORD PROGRESSIONS

In chord progressions, diminished chords are active, and not static chords. They are great transitional chords because of their harmonic ambiguity and their ability to change into dominant chords, major sixth chords, and other chords with very little voice leading motion.

Diminished chords can function in four different ways:

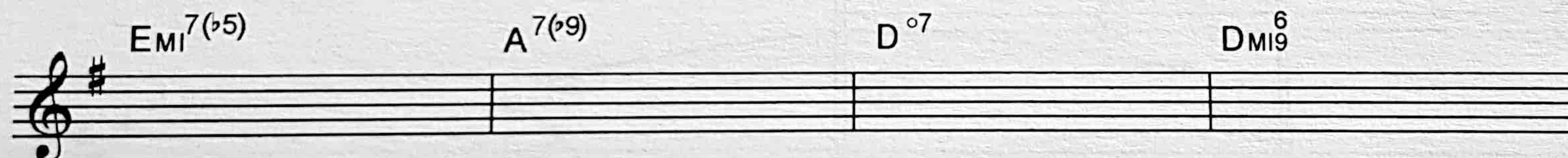
Function:	Short form:
Auxiliary diminished	aux. dim.
Secondary dominant diminished	sec. dom. dim.
Chromatic diminished	chrom. dim.
VII^{o7} / I (VII dim. over root)	VII^{o7} / I

1) Auxiliary diminished – shares the same root as the chord that immediately follows it. In most cases, the auxiliary diminished chord lands on a strong beat in terms of harmonic rhythm. Its placement on a strong beat is usually a surprise, followed by resolution to the “real” tonic.

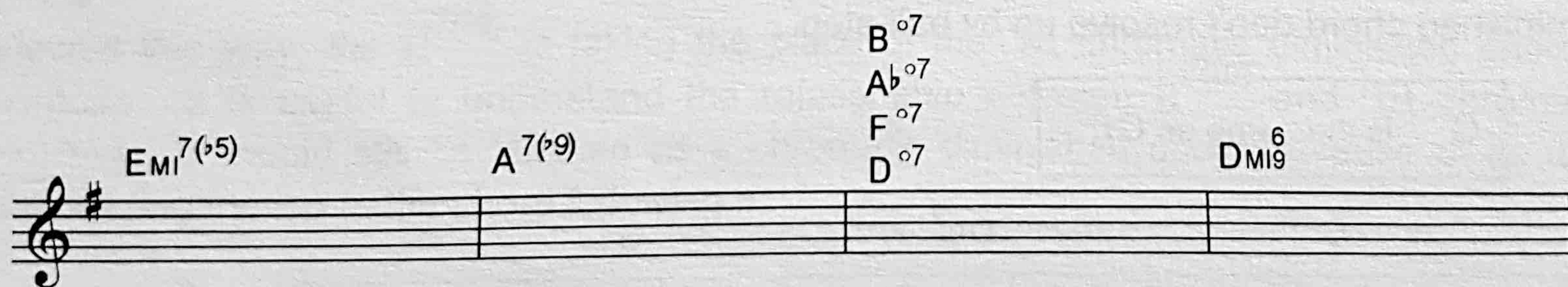
Auxiliary diminished in major:



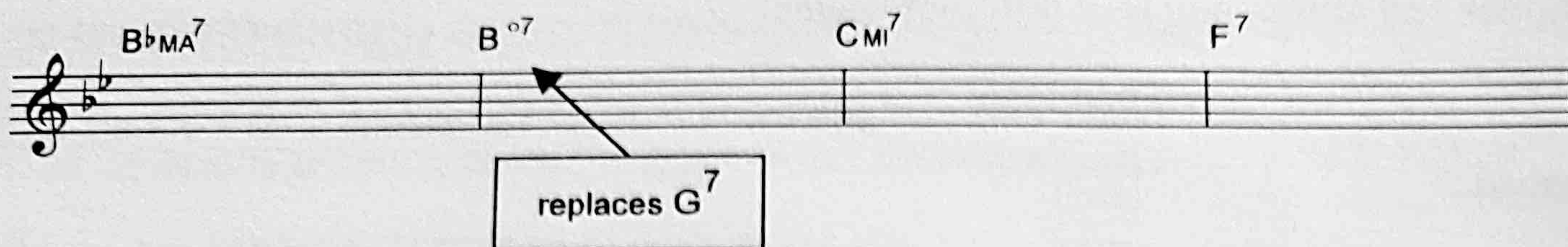
Auxiliary diminished in minor:



Since diminished chords are grouped in “families”, $D {}^{o7} = F {}^{o7} = A^b {}^{o7} = B {}^{o7}$, the following would also be auxiliary diminished functions:



2) Secondary dominant diminished - moves up by half step to the chord that immediately follows it and functions as a secondary dominant. This is one of the most common functions of diminished chords. It can be used anywhere in a chord progression. An example is shown on the next page.



As in the previous examples, one diminished chord is in fact four diminished chords, so any of the diminished chords below is functioning as a secondary dominant.



The same half-step motion up applies to minor key chord progressions.



Secondary dominant diminished chords are usually replacing a dominant chord a third down:

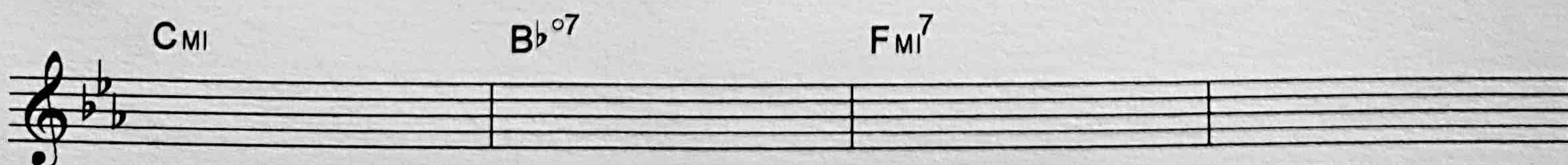


Remember that diminished chords are grouped in “families”, so that $E^{7} = C^{\sharp 7} = G^{7} = B^{\flat 7}$. Therefore, the following diminished chords would serve a secondary dominant function even though the roots of the diminished chord don’t resolve up by half-step.

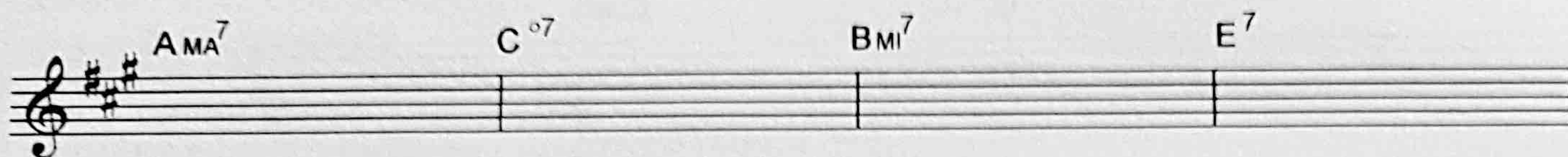
G^{7} is the same as $C^{\sharp 7}$



$B^{\flat 7}$ is the same as E^{7}



3) **Chromatic diminished** – moves down by half step to the chord that immediately follows it. The most common usage is $\flat\text{III}^{\circ 7}$ to $\text{II}^{\text{MI} 7}$ in major keys.

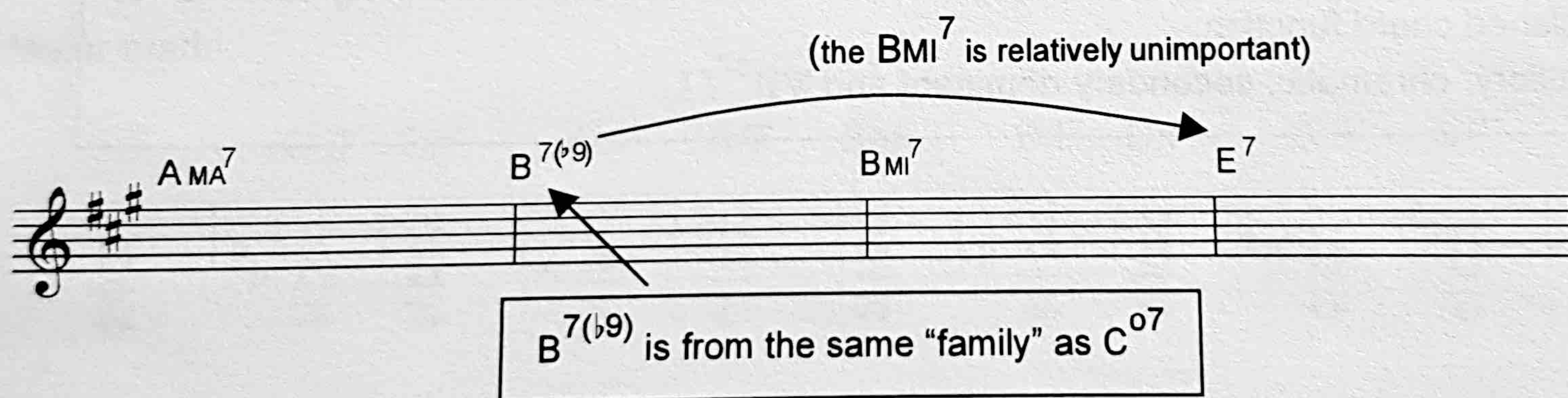


Since diminished chords are grouped in "families" ($\text{C}^{\circ 7} = \text{E}\flat^{\circ 7} = \text{F}\sharp^{\circ 7} = \text{A}^{\circ 7}$), the following would also be chromatic diminished functions:



The chromatic diminished chord deserves some explanation as it is a seemingly odd motion to descend by half-step from a diminished chord. If we were to eliminate the B MI^7 in the previous example and replace it with E^7 (to make two bars of E^7), the chromatic diminished chord would become a secondary dominant diminished chord. This is because the $\text{E}\flat^{\circ 7}$ would then resolve upward by half-step to the E^7 . (Remember also that $\text{E}\flat^{\circ 7}$ (enharmonically $\text{D}\sharp$) contains the same notes as a $\text{B}^{7(\flat 9)}$, with the exception of the B root). If the B MI^7 remains in the chord progression, we still hear the resolution towards E^7 .

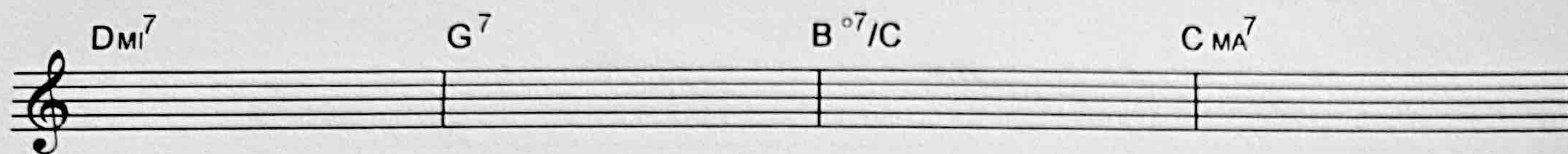
This next example shows a $\text{B}^{7(\flat 9)}$ in place of the $\text{C}^{\circ 7}$ chord from the examples above.



Viewed this way, the $\text{II}^{7(\flat 9)}$ is taking the place of the $\flat\text{III}$ chromatic diminished chord. For analysis purposes, it is useful to understand the relationship between $\text{II}^{7(\flat 9)}$ and $\flat\text{III}$ chromatic diminished. However, it should still be labelled as a chromatic diminished chord because of its unique half-step descending motion to the chord following it.

4) $\text{VII}^{\circ 7} / \text{I}$ ($\text{VII}^{\circ 7}$ over the tonic in the bass) – because this chord is commonly used by composers from Bach to Michel LeGrand, it deserves mention. It is a suspended dominant sound over the tonic in the bass. It lands in a strong beat in terms of harmonic rhythm and delays the $\text{VII}^{\circ 7}$ to I resolution.

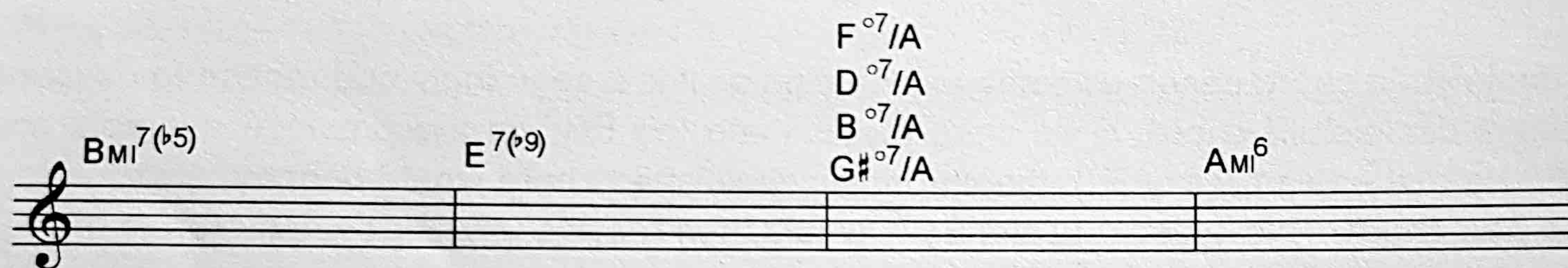
In major:



In minor:



Like all other diminished functions, there are four diminished chords that share the exact same function.



Exercise 3. On separate manuscript paper, write out two four bar chord progressions for each diminished chord function:

Auxiliary, chromatic, secondary dominant and VII^{°7}/I