

EX. 12-1 RT/MA7 CMA7 unstable  
 EX. 12-2 5/#11 CMA7(#11) unstable  
 EX. 12-3 b3/9 CMi9 \* unstable  
 EX. 12-4 b7/13 C13 unstable  
 EX. 12-5 5/#11 C7(#11) unstable  
 EX. 12-6 3/#9 F7(#9) unstable  
 EX. 12-7 b5/11 DMi7b5 unstable  
 EX. 12-8 b3/9 Fmi9 \* unstable  
 EX. 12-9 b9/RT F7(b9) stable

Great use of b9 interval, here displaced by an octave to form a "Spread" voicing (Spread Technique Chapter 16)

## Low Interval Limits

As voicings descend in register, their sound becomes increasingly dark and at a point, muddy and unusable except for special effects. The science behind this descent into mudville is the Overtone Series. More information on the Overtone Series is available in books on the theory of acoustics.

The most compelling factor within this phenomenon is the interval created by the voicing's lowest note and the root of the chord. There are two different scenarios to consider:

### Scenario #1

If the lowest note of the voicing is the root, then determine the interval from that root to the next note higher in the voicing and check that interval against the **Low Interval Limits Chart** (page 94). This chart is a guide, only. Intervals gradually darken in sound, thus their application slightly below the chart may be appropriate. Also, consider the length of the notes in question. Don't necessarily abandon good voice-leading because of a low 3rd that is only present for a sixteenth or eighth note value. Experience will lead to better judgment [Ex. 12-10, 12-11].

EX. 12-10 E<sup>b</sup>7  
 WHOLE STEP BELOW THE LIMIT.  
 WILL SOUND DARKER.  
 MI 7TH INTERVAL

EX. 12-11 FMA7  
 WELL WITHIN THE LIMIT  
 PER. 5TH INTERVAL