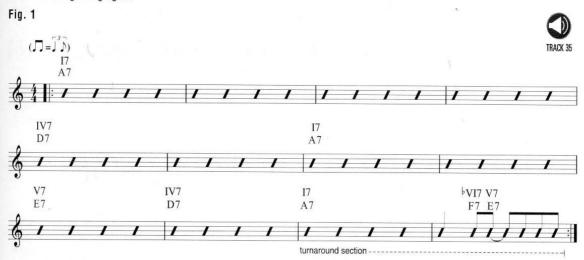
# CHAPTER 10: BLUES HARMONY AND PENTATONIC SCALES

**S**o far we have been discussing harmony in traditional music theory terms. Blues (an American art form which blends elements of African and European music), challenges many of these rules.

#### THE 12-BAR BLUES PROGRESSION

Traditional blues is based on a I–IV–V chord system, that is, the I, IV, and V chords of the major scale. However, blues music emphasizes dominant seventh chords—not only applying them to the V chord, but to the I and IV as well. This tosses many of the rules of diatonic harmony right out the window. However, blues harmony is so ingrained in our pop music psyche that our ears accept it as normal.

The basic template for blues music is the "12-bar blues progression" (Fig. 1), a 12-bar system that is usually continually cycled throughout an entire song. The progression is split into three sections of four measures each. In these three sections, the I, IV, and V chords have their designated slots. The first section introduces the I chord, which establishes the key. The middle section moves to the IV chord, then back to the I. The third section is the most active. It begins with all three chords in descending succession (V–IV–I), then ends on what is called a *turnaround*. The turnaround section in blues appears in the last two measures, and usually comprises a I—VI–V cadence. It is called the turnaround because it "turns" the progression around to start at the beginning again.



A common occurrence in 12-bar blues is the *quick change*. This is when the four measures of the I chord in the beginning are interrupted by one measure (measure 2) of the IV chord (Fig. 2). Other than this, the progression remains the same.

Fig. 2



12-bar blues progressions are repeated many times before the song reaches its conclusion. Fig. 3 features a standard ending for a 12-bar blues. This replaces the turnaround measures.

Fig. 3



Blues music is usually, but not always, played in a shuffle, or eighth-note shuffle rhythm. Tying together the first two notes of an eighth-note triplet grouping, leaving the third note unaltered, creates the eighth-note shuffle feel (Fig. 4).

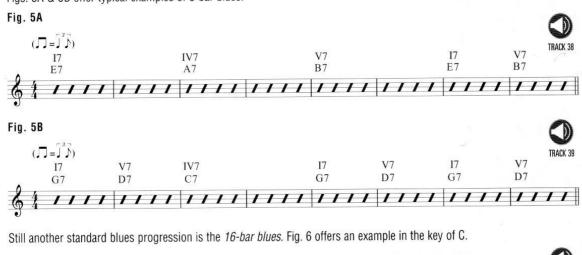
Fig. 4

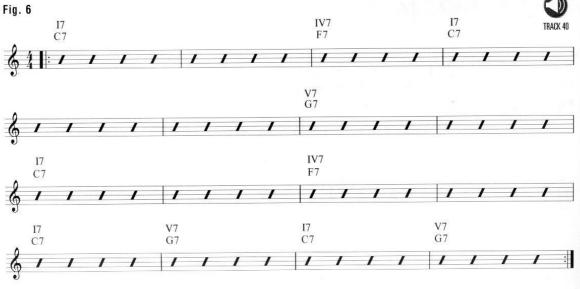
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#### OTHER BLUES PROGRESSIONS

Another popular I–IV–V blues progression is the *8-bar blues*. 8-bar blues progressions come in a variety of I–IV–V patterns. Figs. 5A & 5B offer typical examples of 8-bar blues.





Blues music occasionally draws from diatonic harmony, most often in minor keys. A *minor blues* typically follows the 12-bar format, but utilizes minor scale changes (i–iv–v), rather than dominant seventh chords. Minor seventh voicings are often used, and it's not uncommon to include VImaj7, as well as altered V7 chords (Fig. 7).

Fig. 7

17
Cm7
Fm7
Cm7

107
Cm7

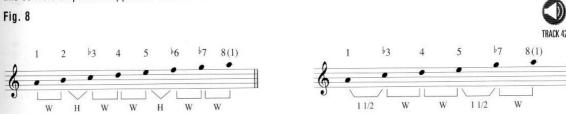
Cm7

# MINOR PENTATONIC AND BLUES SCALE

Abmaj 7

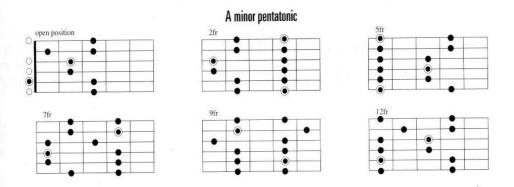
G+7

Blues melodies and solos rely heavily on the *minor pentatonic scale*. The minor pentatonic scale is a five-note scale (the word pentatonic has Greek origins: *penta* meaning five, and *tonos* meaning tone) derived from the natural minor scale. (Note: The term *natural minor* scale simply refers to the minor scale, or relative minor scale of the major scale. It is used mainly when being compared to other minor-scale types, which will be discussed later.) Specifically, it is made up of the root,  $\frac{1}{2}$ 3rd, 4th, 5th, and  $\frac{1}{2}$ 7th scale degrees of the minor scale (minor pentatonic formula:  $1 \rightarrow 3 - 4 - 5 \rightarrow 7$ ). This essentially omits the "awkward" half-step intervals, which are normally located between the 2nd and the  $\frac{1}{2}$ 3rd, and the 5th and  $\frac{1}{2}$ 6th scale tones. Fig. 8 depicts this conversion process applied to the A minor scale.



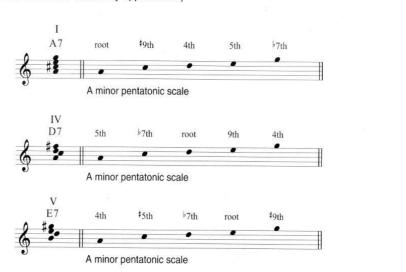
Removing the half-step intervals creates minor 3rd scale gaps between the root and  $^{\downarrow}$ 3rd, and the 5th and  $^{\downarrow}$ 7th. This actually transfers to finger-friendly, two-note-per-string patterns on the fretboard—small wonder it is so popular among guitarists of all styles, from rock to jazz. Fig. 9 shows six patterns of the A minor pentatonic scale. The sixth pattern is actually the same as the open-position pattern, just an octave up.

Fig. 9



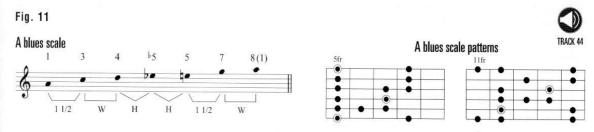
The minor pentatonic scale acts as a "one scale serves all" in I–IV–V blues progressions. When used to its full potential, its unique properties provide a wealth of interesting chord tone possibilities. Fig. 10 shows the chord-coloring potential of the A minor pentatonic scale when used in an A blues setting. The #9th (C against the A7 chord, and G against the E7 chord), and the #5th are referred to as *blue notes*, or tension notes that technically clash with the harmony. (Note: The minor pentatonic scale is also an excellent scale choice for minor-key applications.)

Fig. 10



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Another scale, so widespread in blues music that it gets its name from the genre itself, is the blues scale. The blues scale is a six-note scale comprised of the notes of the minor pentatonic scale, but with an added  $\,^{\downarrow}$ 5th degree (blues scale formula:  $1^{-\downarrow}3^{-4}^{\downarrow}5^{-5}^{-\downarrow}7$ ). The  $\,^{\downarrow}$ 5th provides a unique *chromatic passage* (half-step sequence) from the 4th to the 5th scale degrees. Fig. 11 shows the A blues scale on the staff, along with two popular scale patterns.



In an A blues setting, the  $^{\downarrow}$ 5th (E $^{\flat}$ ) of the A blues scale provides a  $^{\flat}$ 5th against the I chord (A7), a  $^{\flat}$ 9th against the IV chord (D7), and a major 7th against the V chord (E7). While the blue note (the  $^{\flat}$ 5th) is usually not leaned on too much, it provides the characteristic "tough" sound popular in blues music when used in passing.

## MAJOR PENTATONIC SCALE

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Still another popular scale used in blues, and virtually all other styles as well, is the *major pentatonic scale*. The major pentatonic scale is a five-note scale derived from the major scale. Specifically, it consists of the root, 2nd, 3rd, 5th, and 6th scale degrees of the major scale (major pentatonic formula: 1–2–3–5–6). In similar fashion to the minor pentatonic scale, this eliminates the half-step intervals between certain scale steps. In the major scale, these are between the 3rd and the 4th, and the 7th and the octave. Fig. 12A depicts the major-pentatonic conversion process applied to the C major scale, and Fig. 12B shows C major pentatonic scale patterns.

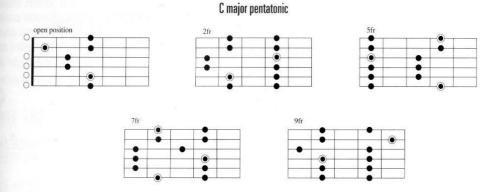
Fig. 12A

C major scale

1 2 3 4 5 6 7 8(1)

W W H W W H W W H W W H T 11/2 W 11/2

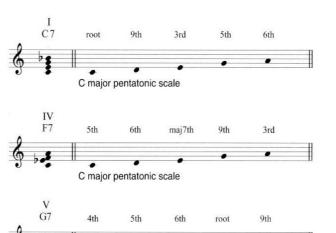
Fig. 12B



Notice that these patterns are similar to the A minor pentatonic scale patterns from Fig. 9. As a matter of fact they are exactly the same! The only exception is that the roots are different. Just as the C major scale is relative to the A minor scale, the C major pentatonic scale is relative to the A minor pentatonic scale, and vice versa. ("Relativity" concepts are discussed in depth in Chapter 11, "Modes.")

In some styles, especially rock and country, the major pentatonic scale is used as a stripped-down version of the major scale. In blues it is used selectively to service the I–IV–V dominant blues changes. Fig. 13 gives a rundown of the chord-tone possibilities within the C major pentatonic scale when applied to the I–IV–V chords in a C blues progression.

Fig. 13



As you can see, with the exception of the major 7th rub against the IV chord (F7), most of the note selections are safe, sweet, inside choices: (roots, 3rds, 5ths, 9ths, 6ths).

C major pentatonic scale

#### PARALLEL PENTATONIC SCALES

In blues and blues-based music (such as blues rock and many forms of jazz), it's common practice to mix parallel major and minor pentatonic scales. Not to be confused with "relative scales" (two scales that share the same notes), parallel scales are scales that share the same tonic, or root. For instance, as we know, the A minor pentatonic and C major pentatonic scale are "relative." However, the A minor pentatonic scale is "parallel" to the A major pentatonic scale—two entirely different scales, but they share the same root. Fig. 14 shows what happens when you combine the A minor pentatonic with the A major pentatonic scale.

A minor pentatonic

A major pentatonic

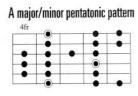
A major pentatonic

A minor pentatonic and A major pentatonic scales combined

1 2 3 3 3 4 5 6 5 7 8(1)

Two of the notes overlap (root and 5th), but the end result is an eight-note scale that exhibits both major and minor (major 3rd and minor 3rd) properties. Usually reserved for the I chord in blues, it provides a cornucopia of chord tones. Fig. 15 shows overlapping A minor and A major pentatonic scales in pattern form.

Fig. 15



#### **Oniz #10**

(Answers are in the back of the book.)

1)	What is the quick-change chord in 12-bar blues?	
2)	Where does it occur?	
3)	Where are the turnaround bars in a 12-bar blues?	
4)	How many notes are there in the minor pentatonic scale?	
5)	How many half-step intervals does it contain?	
6)	How many notes are there in the blues scale?	
7)	The 5th of the blues scale creates a 9th alteration for which chord: the I, the IV, or the	V?

8) What is the formula for the major pentatonic scale? \_\_\_\_\_9) What is the most common chord quality in blues? \_\_\_\_\_

10) The A minor pentatonic scale is *relative* to the \_\_\_\_\_ pentatonic scale.11) The A minor pentatonic scale is *parallel* to the \_\_\_\_\_ pentatonic scale.

### Ear Training Drill #5

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In each example you will hear a scale played in two octaves. Decide if it is minor pentatonic, major pentatonic, or the blues scale. All examples start on the root of the scale. Write your answers in the blanks provided. (Answers are in the back of the book.)

Cubical R (5)		
1)	5)	9)
2)	6)	10)
3)	7)	11)
4)	8)	12)