

CHAPTER 3

HARMONIC TENSION / RESOLUTION



As we have mentioned, most pieces of music, regardless of style or genre, have focal points where a feeling of temporary tension or anticipation is followed by a satisfying resolution. This is what helps give music its power and emotion. In the previous chapter, we discussed several rhythmic devices that create tension. In Chapter Three, we will turn our attention to harmonic devices, particularly the movement from the dominant V chord to the tonic I, known as a V to I cadence.

[NOTE: As mentioned in the Preface, most of the focal point devices in this book do not require an advanced knowledge of music theory to be understood. However, there will be a few devices that assume a basic acquaintance with fundamentals like scales and diatonic triads in the major and minor keys. Moving forward, Roman numeral analysis will be included for all chord progressions in the remaining chapters, mainly to aid in recognizing the dominant V to I cadences at most focal points. In some songs, non-diatonic chords (secondary doms, modal interchange, dim7, etc.) will occasionally be found. A detailed knowledge of these may be helpful, but it is not necessary for understanding our main topic of hooks and focal points. All these terms and concepts can be found in the textbook Spinning Gold, Vol. 1 and 2, available on the Learn Pop Theory website.]

If you have taken a basic theory or fundamentals course, you are probably familiar with harmonic tension and the V to I cadence. If not, here's a quick review of some basic points.

In terms of major scales, you know that the first note of the scale, also called the **key note** or **tonic note**, is the resolving point or “home base” where all other notes eventually return. The note with the most tension is the seventh degree, also called the **leading tone**. These notes are labeled below for the C major scale.

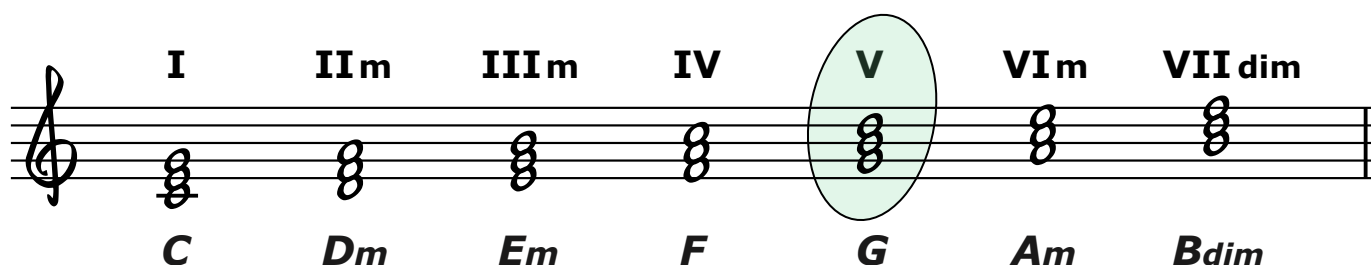
The C Major Scale



The leading tone B is considered most unstable because it is only a half step away from returning to home base (the tonic C). Try playing or singing the scale in ascending order, but **stop on the B note** You will feel the tension until you eventually play the tonic C note to resolve the sound. For this reason, the last melody note at the very end of a song is almost always the tonic note.

You will also remember that there are **seven diatonic chords** — one built on each note of the scale.

Seven Diatonic Chords – Key of C



These chords have similar characteristics in terms of tension and resolution. The I chord acts as home base and all other chords will carry some tension until the progression eventually resolves back to I. Therefore, most songs also end on the I chord.

In terms of tension, the VII dim triad (B dim chord in the key of C) certainly has instability with the leading tone B as its root note, but this chord is very rare in pop and rock. We will focus instead on the **V chord** — another strong tension producer with the leading tone in the middle of the chord. (In the key of C, this would be a G chord, containing the notes G, B, and D.) Of the three most common chords in any major key - I, IV, and V - it is the dominant V that has the greatest feeling of anticipation:

tonic	I chord	“home base” resolution point — no tension
sub-dominant	IV chord	transition — small amount of tension
dominant	V chord	building anticipation — maximum tension

As we heard in Chapter Two, rhythmic tension is often at its greatest in the last two or three bars of the verse or pre-chorus, leading into the chorus. This is also true for harmonic tension. In the following song by Neil Diamond, **try stopping the recording briefly at 1:02 just before the chorus**. You will feel tension until you press start again and let the song continue into the chorus. The key is B major. Start listening at **0:29**.

"Sweet Caroline" — Neil Diamond — 1969

B major

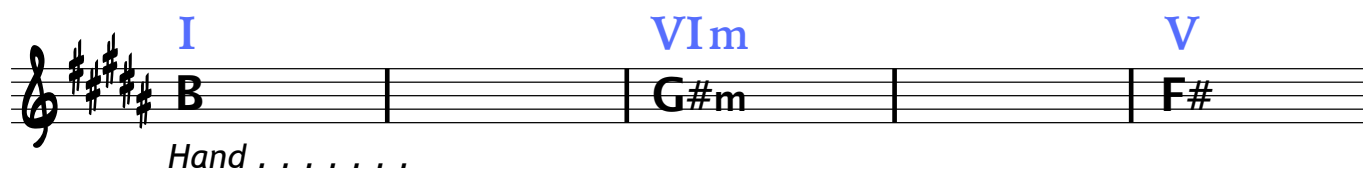


For AUDIO, see the “Song Examples” playlist in the right sidebar, and click on track 1 song title. To navigate within the audio track, slide the progress bar forward to the desired starting point.

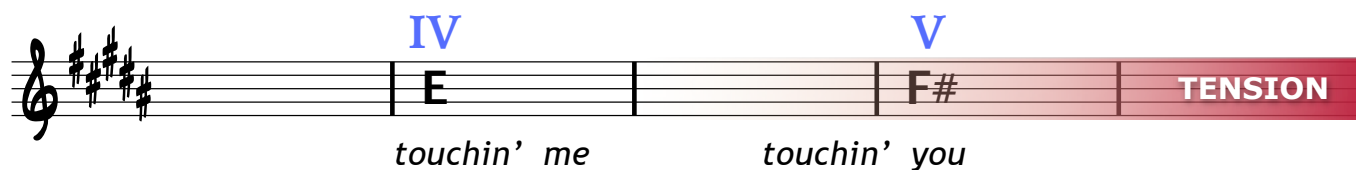
0:29 VERSE

Was in the spring

Who'd - a believe



0:44 PRE-CHORUS



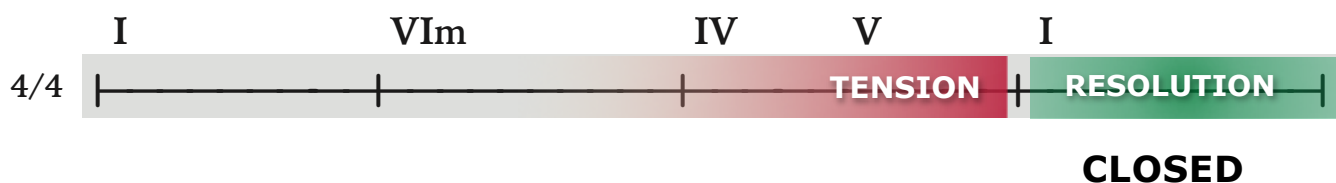
1:03 CHORUS

In “Sweet Caroline,” there is maximum tension during the V chord at the end of the pre-chorus. When the resolving chorus enters, there is a satisfying, uplifting feeling created by the brief return to the “home” chord (I).

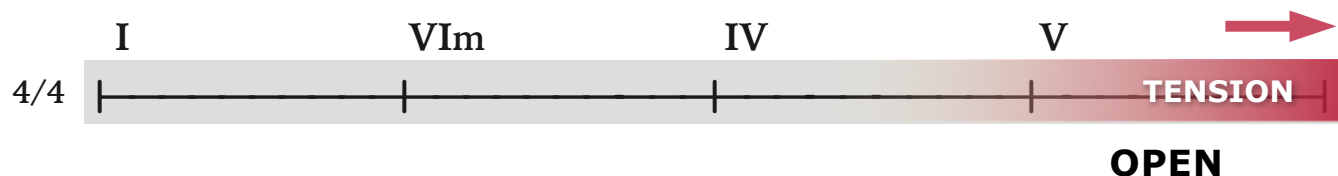
Exactly where the V to I cadence occurs in the form (ie. which measure) can have a big impact on the transition from verse to chorus. Should the sound resolve to I on the last measures of the verse, or should the resolution wait until the first bars of the chorus?

OPEN VS. CLOSED HARMONIC SEGMENTS

In terms of measures, most sections or phrases in pop & rock songs are in multiples of four — ie., 4-bar, 8-bar, 12-bar, or 16 bar segments. The resolution to the I sometimes occurs on the last bar of a section or phrase, wrapping things up before moving on to the next segment. In this case the segment is said to be “**closed**” harmonically. Here is an example of the common four-bar “doowop” progression that is closed, resolving back to I within the four bar segment:



However, it is more common in pop music to have an **open** segment like the following version of the doowop progression:



In this open-ended version, the tension of the V chord is not resolved within the four bars. We must wait until the entrance of the next segment to hear a possible resolution to the I chord. Pop and rock music is often constructed with a steady stream of open-ended phrases, creating great **forward momentum in the harmony**. An entire song may be based on repetitions of the four-bar doowop progression, constantly tumbling forward. In these songs the progression may never come to rest on the I chord for any extended period. In fact, there may even be a fade out, with no final ending on the I at all.

Just as with the smaller four-bar segment, larger sections like a verse or chorus may be open-ended or closed. If the goal is to create the most dramatic and memorable entrance possible for the chorus, then the **end of the verse should be open and unresolved** — preferably ending on the tension V chord. A closed resolution to I before the chorus would dampen the forward momentum and dilute the power of the chorus entrance.

It should be added that this idea actually applies to all types of tension, not just harmonic. You will recall that the rhythmic tension discussed in Chapter Two was also open and unresolved, with the resolution saved for the chorus entrance.



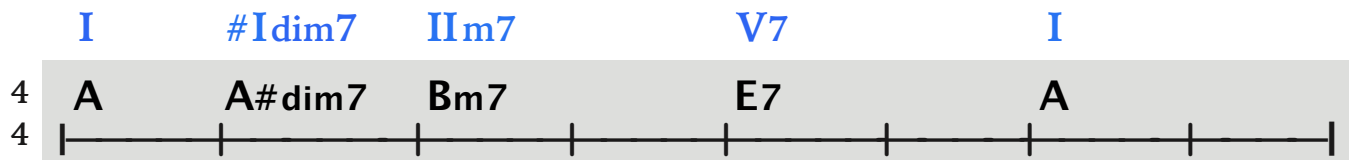
V to I - VERSE to CHORUS

The following song by Garth Brooks is a great example of the V to I cadence at the chorus entrance. You will notice how the chord progression hangs on the tension V for 4

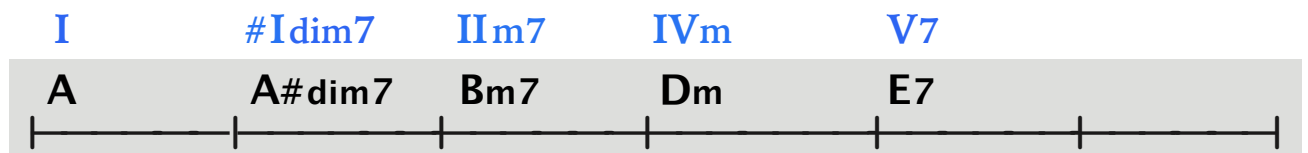
bars and also the extra tension created by the bass line. On the last 3 beats before the chorus, the bass walks up the scale with the notes E, F#, and G#. This leaves us hanging on the leading tone G#, just before the resolution to the tonic I chord.

"Friends in Low Places" — Garth Brooks — 1992

A major



0:09 VERSE

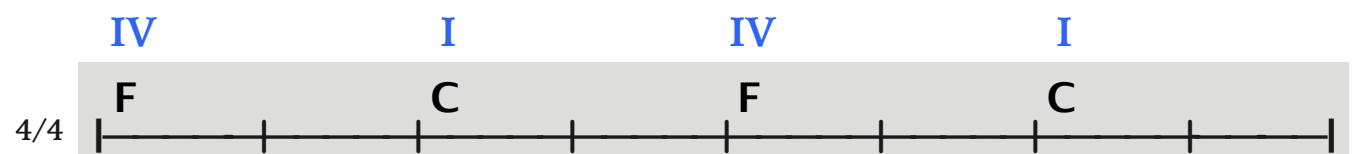


e f# g# 0:45 CHORUS
bass walkup
w leading tone g#

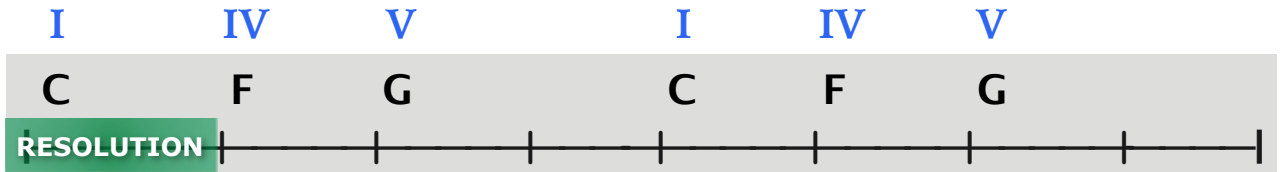
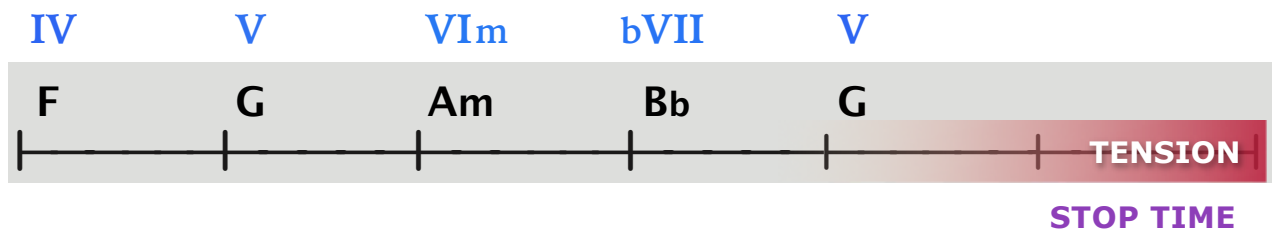
On the 2010 hit "This Is Our Moment," the V chord only lasts for 2 bars, but stop time helps increase the tension at the focal point. Also note the placement of the song title right at the focal point for maximum impact.

"This Is Our Moment" — Kenny Chesney — 2010

C major



0:14 VERSE

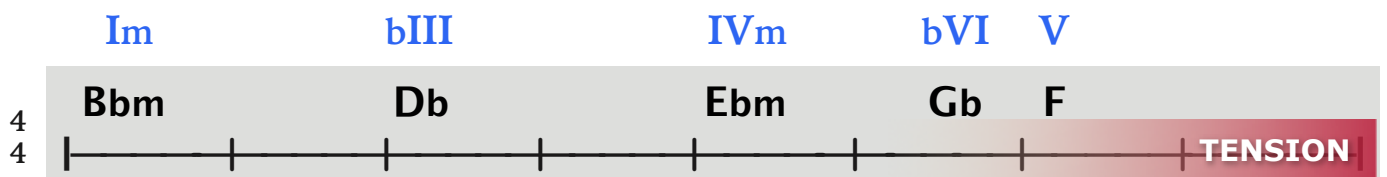


0:37 CHORUS w title

The song “Liar” by Jelly Roll offers an example of the V to I cadence in a natural minor key. In this case, the V chord stands out because it is borrowed from harmonic minor, and includes the leading tone (the defining note that transforms natural minor into harmonic minor). Start listening at **0:21**.

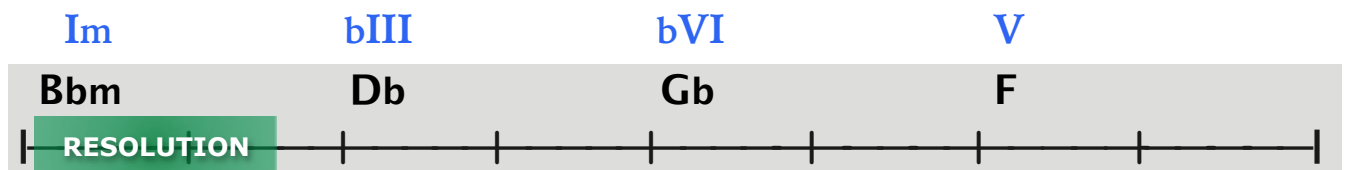
“Liar” — Jelly Roll — 2024

Bb minor



0:21 last half of VERSE

STOP TIME




0:37 CHORUS w title

Additional songs with V to I – VERSE to CHORUS

1965	<i>Like a Rolling Stone</i>	Bob Dylan
1966	<i>Ain't Too Proud to Beg</i>	The Temptations
1967	<i>Ruby Tuesday</i>	The Rolling Stones
1973	<i>Rosalita</i>	Bruce Springsteen
1977	<i>Don't Stop</i>	Fleetwood Mac
2000	<i>I Need You</i>	LeAnn Rimes
2024	<i>Lose Control</i>	Teddy Swims


V to I - BEFORE SONG TITLE

As we discussed in Chapter Two, focal points can also be created to highlight the song title when it isn't at the chorus entrance. On the next 1964 hit, the focal point and song title occur at the end of the refrain (last part of the verse). Once again, the V to I cadence is part of the focal point. Also present is a drum fill (rhythmic device heard on several songs in the previous chapter).

"Just Like Romeo and Juliet" – Reflections – 1964 Eb major  5

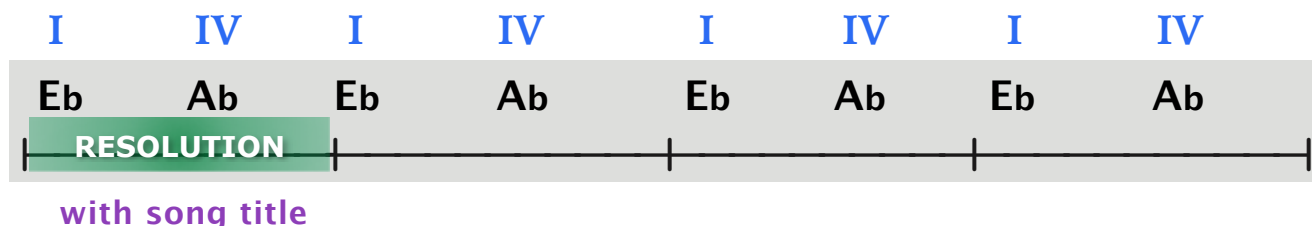
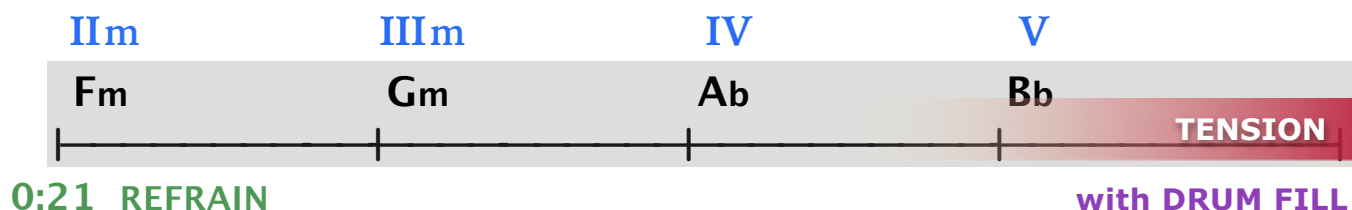
I IV I IV I IV I IV

E♭ A♭ E♭ A♭ E♭ A♭ E♭ A♭

4/4 

0:08 VERSE

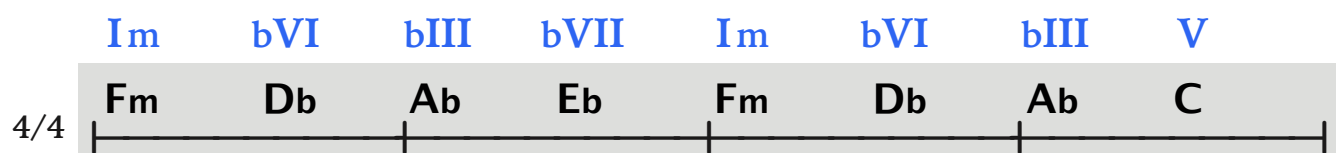
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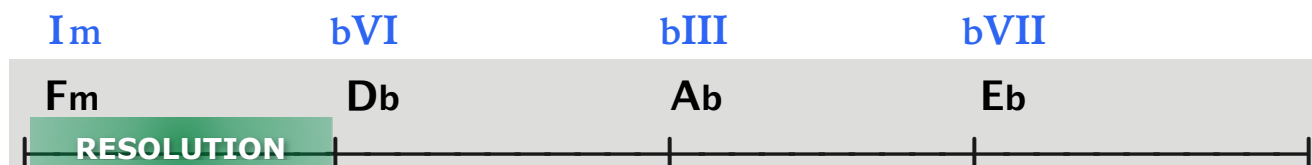
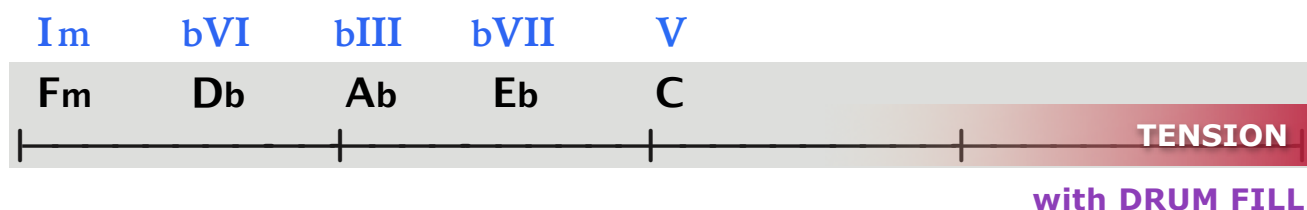
The following Green Day song has not one, but two focal points in the form. There is the usual hook leading into the chorus, which features the V to I cadence and a drum fill. Then there is a second focal point at the end of the chorus, highlighting the song's title. This focal point has three tension devices - the V to I cadence, stop time, and an extension of the section (extra 9th bar). Start listening at **0:32**.

"Holiday" — Green Day — 2005

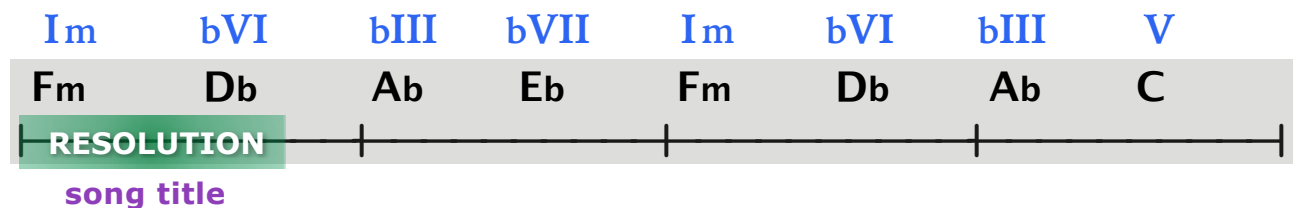
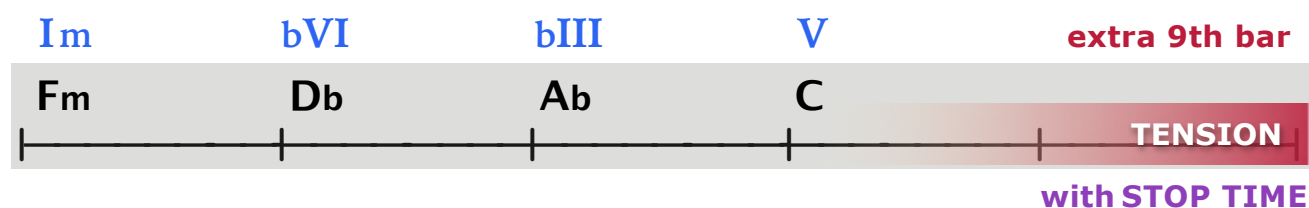
F minor



0:32 VERSE 2



0:46 CHORUS

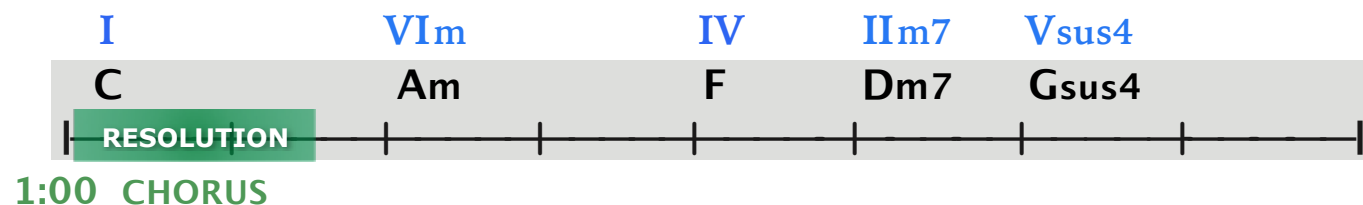
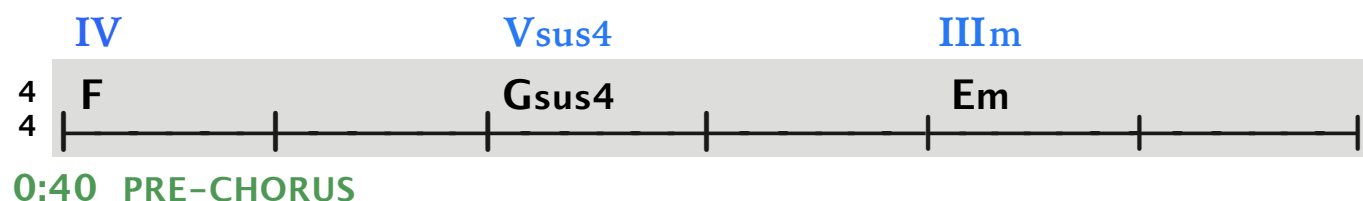


V to I - PRE-CHORUS to CHORUS

Here's an example where the V to I cadence occurs from pre-chorus to chorus. This song also has a brief leading tone right before the chorus entrance. Listen for the treble drone on the tonic note (F) throughout most of the pre-chorus. Just before the chorus, the drone drops a half step to the tension-producing leading tone (E). Start listening at **0:40**.

"Gonna Get Over You" — Sara Bareilles — 2010

C major

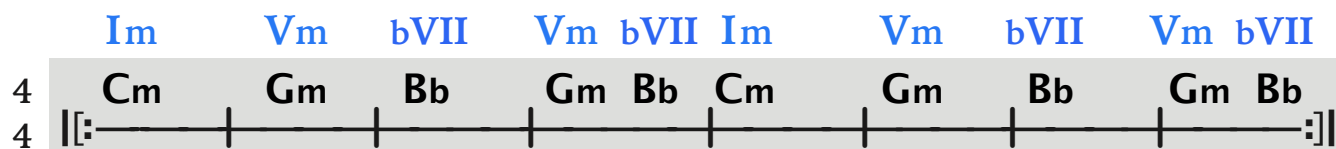


The 2011 song "Rolling in the Deep" offers another pre-chorus example with an obvious leading tone, this time in a minor key. Listen at the end of the pre-chorus for the

change from the Gm to the G major chord. Inside these chords, the only note that changes is a Bb (in the minor chord) to B natural (in the major chord). This B natural is the leading tone of the key (borrowed from C harmonic minor).

"Rolling in the Deep" — Adele — 2011

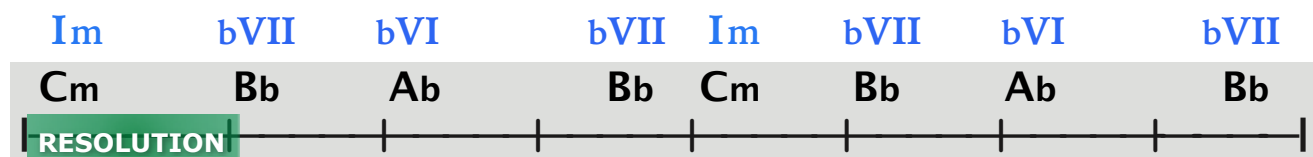
C minor



0:05 VERSE



0:42 PRE-CHORUS



1:00 CHORUS

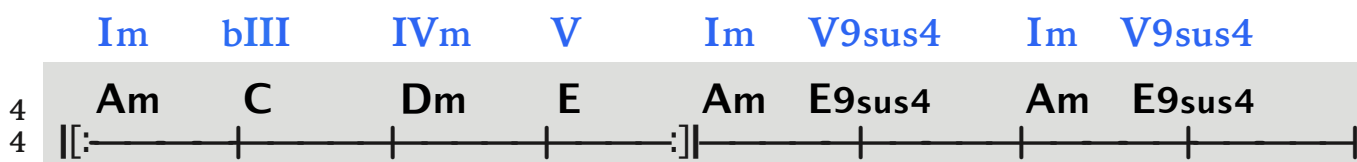
As mentioned in Chapter One, many pop & rock songs have a signature guitar riff that functions as a hook phrase, and often this riff is previewed at the beginning of the song. Our next minor key song is a good example of these elements. After an extended intro (not shown), an instrumental version of the chorus enters, previewing the riff. Then when the vocal chorus enters much later (at 1:28), we hear the familiar riff return underneath the singing, adding a memorable hook phrase to the focal point. Start listening at **0:40**.

"Crazy on You" — Heart — 1976

A minor

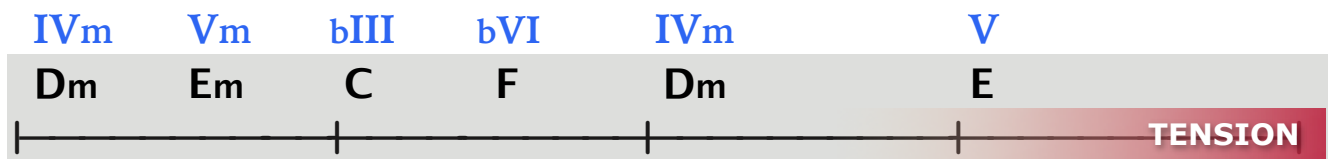


0:40 INST. CHORUS w signature riff



0:58 VERSE

p.12



1:21 PRE-CHORUS



1:28 CHORUS w signature riff

Additional songs with V to I – PRE-CHORUS to CHORUS

1963	<i>Be My Baby</i>	The Ronettes
1966	<i>You Baby</i>	The Turtles
1974	<i>You Ain't Seen Nothin' Yet</i>	Bachman Turner Overdrive
1979	<i>Heartbreaker</i>	Pat Benatar
1984	<i>Jump</i>	Van Halen
1991	<i>Something to Talk About</i>	Bonnie Raitt
1999	<i>Livin' La Vida Loca</i>	Ricky Martin
2001	<i>Magnificent Obsession</i>	Steven Curtis Chapman
2005	<i>Dirty Little Secret</i>	All-American Rejects
2010	<i>They Try</i>	Rascal Flatts
2012	<i>Right Back Atcha Babe</i>	Tim McGraw
2020	<i>Bragger</i>	Kelsea Ballerini

V to I - RELEASE back to CHORUS

Many pop songs that have a verse / chorus or a verse / pre-chorus / chorus structure also feature another section that usually appears only once. It is not revealed until mid-way through the song, after hearing several repetitions of verse and/or chorus. The introduction of this new part brings fresh energy and interest, often introducing a new twist on the lyrics, new key, new chords, or a new texture. On the musical journey, this section could be thought of as a brief sidetrack before returning to the main track.

This new section is often called the “**bridge**,” but this term is misleading because the section doesn’t really function as “bridge” to a new destination. It is usually preceded by a verse or chorus and followed by a return to the verse or chorus. (If any section could be called a “bridge,” it would be the pre-chorus, which clearly bridges the space between the verse and chorus in the musical journey.) Moving forward, we will call this new section the “**release**” since it functions as a refreshing release from the previous repeated sections.

Quite often there is a focal point at the end of the release, heading back to several repetitions of the chorus. This occurs on the following 2003 hit by Kelly Clarkson. Notice the groove suspension at the entrance of the release, and the tension V chord with prominent leading tone at the end, creating great anticipation for the return of the chorus. Start listening at **1:54**.

"Miss Independent" — Kelly Clarkson — 2003



key
Bb

	I	bIII	IV	bVI	bVII	I	bIII	bVI	IV/3	bVII
4	B	D	E	G	A	B	D	G	E/G#	A
4	: ————— :									

1:54 CHORUS

new key
B min:

	Im	bVIImaj7	bIII	V
	Bm	Gmaj7	D	F#
	: ————— :			

2:16 RELEASE

MAIN GROOVE is SUSPENDED

LEADING TONE
in HARMONY

The following song by Passion Pit uses both a V chord and a drum fill to create tension at the end of the release. Start listening at **2:24**.

"Carried Away" — Passion Pit — 2012

C major



4/4

V7sus4	VIIm7	IV	I	V7sus4	VIIm7
G7sus4	Am7	F	C	G7sus4	Am7

2:24 RELEASE

IV6	Vsus4	I/5	IV6	Vsus4	I/5	IV6	Vsus4	V
F6	Gsus4	C/G	F6	Gsus4	C/G	F6	Gsus4	G

TENSION
DRUM FILL

I	VIIm7	IV6	I	VIIm7	IV6
C	Am7	F6	C	Am7	F6

[: RESOLUTION :]

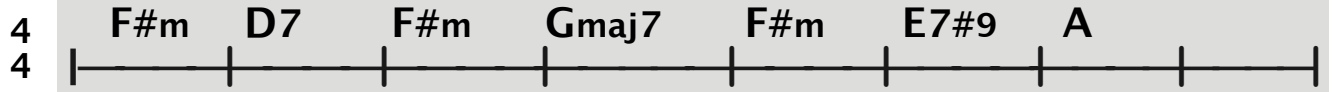
2:48 CHORUS

Here's an example by The Beatles that has the verse/refrain form discussed in Chapter Two, rather than a true verse and chorus structure. After two repetitions of the verse/refrain, a release is heard featuring a new key and a new drum pattern (drummer Ringo switches from dragging, syncopated snare hits to a standard backbeat with smoother forward motion). Once again, the release ends with the tension V chord, although this time there is additional tension created by including an extra 9th bar before returning to the verse. Start listening at **0:54**.

"Ticket to Ride" — The Beatles — 1965

key
A maj:

VI^m IV⁷ VI^m bVII^{maj7} VI^m V^{7#9} I



0:54 REFRAIN

new key
A blues:

IV⁷ V IV⁷ V extra 9th bar



1:09 RELEASE

TENSION

new key
A maj:

I II^{m7} V⁷



1:26 VERSE

**Additional songs with
V to I – RELEASE to CHORUS**

1954	<i>Sh-Boom</i>	The Chords
1964	<i>Dancing in the Street</i>	Martha & The Vandellas
1980	<i>Giving It Up for Your Love</i>	Delbert McClinton
1983	<i>You Can't Hurry Love</i>	Phil Collins

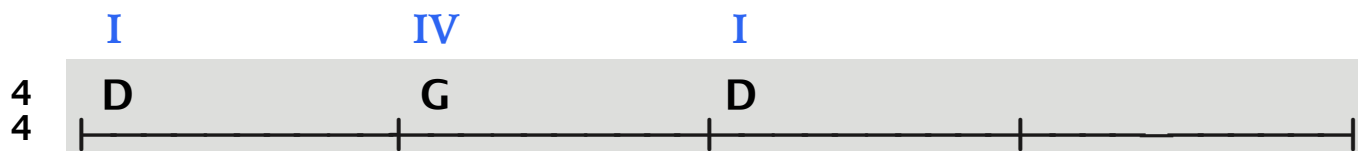
12-BAR BLUES TURNAROUND

Many pop & rock songs that use the 12-bar blues form feature the tension V chord at the end of the verse. This creates a V to I cadence every time the music repeats back to the beginning of the form. Often there is also a special riff on the last two bars called a “**turnaround**,” which perfectly describes the function of the riff.

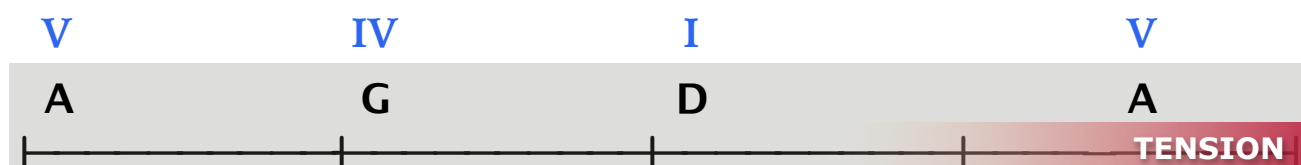
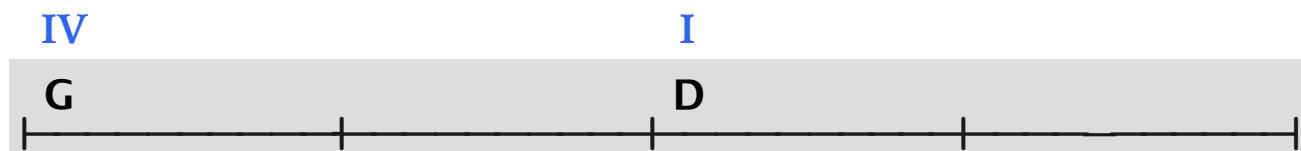
Z Z Top’s cover of “Dust My Broom” (originally recorded by Robert Johnson in 1936) features a classic **descending turnaround riff**. It starts on beat 2 in the 11th measure of the 12-bar form (shown below). Start listening at **0:30**.

“Dust My Broom” — Z Z Top — 1979
(orig. Robert Johnson)

D blues



0:30 VERSE



0:56 TURNAROUND RIFF



1:01 repeat VERSE

RESOLUTION

Here’s a country song with some blues influence. It uses the 12-bar form and features a similar descending turnaround. This time, however, the turnaround is only in the bass line, so listen closely. Start listening at **0:29**.

"Give It Up or Let Me Go" — Dixie Chicks — 1999

A blues



— 0:29 (start of verse) 12-bar blues form

— 0:52 (end of verse) **TURNAROUND RIFF** in bass line - measures 11 and 12.

The following Rolling Stones blues cover features an ascending turnaround on the last two measures of the 12-bar form. Start listening at 0:29.

**"I Can't Be Satisfied" — Rolling Stones — 1965
(orig. Muddy Waters)**

G blues



— 0:29 (start of verse) 12-bar blues form

— 0:53 (end of verse) ascending **TURNAROUND RIFF** - measures 11 and 12

The next example features a common variation of the previous turnaround, adding triplet figures on bar 11, but retaining the final 3-note walk-up to the V chord. Start listening at 0:54.

"Pride and Joy" — Stevie Ray Vaughan — 1983

Eb blues



— 0:54 (start of verse 2) 12-bar blues form

— 1:13 (end of verse 2) **TURNAROUND RIFF** - measures 11 and 12

Additional songs with 12-BAR BLUES TURNAROUND

1959	<i>What'd I Say</i>	Ray Charles
1965	<i>Seventh Son</i>	Johnny Rivers
1980	<i>Sweet Home Chicago</i>	The Blues Brothers
1989	<i>Before You Accuse Me</i>	Eric Clapton
1992	<i>Walkin' Blues</i>	Eric Clapton
1994	<i>It Hurts Me Too</i>	Eric Clapton

HARMONY device #3 AVOIDING THE I CHORD

One way to make the tension - resolution point more dramatic is to **avoid the tonic I chord** for several measures before arriving at the hook. Basically, the longer you stay away from the I, the more you want to hear it. Some songs will avoid the I for up to 10 or 12 measures before the chorus, but there are limits. If the song goes too long without anchoring back to the I, the sense of key center can begin to drift, and soon a new chord will start to sound like “home base,” changing the key.

On The Ronettes' 1963 hit “Be My Baby” (shown below), the I chord is avoided for 10 bars leading up to the chorus entrance. Also note the strong harmonic movement in the pre-chorus, as a series of secondary dominant chords tumbles toward the focal point.

“Be My Baby” also features rhythmic movement from a “disjointed” to solid rhythm pattern. (You will recall that this tension device was discussed earlier in Chapter Two.) The song starts with the drums playing an unbalanced variation of a backbeat, scored below. The snare hits only on beat four — half the usual 2 / 4 backbeat. This is followed by hits on beats “and 4 and” in the next measure.

UNBALANCED SNARE PATTERN



This two-bar pattern is repeated throughout the verse and pre-chorus, creating a slightly uneasy feeling with some tension. When the chorus finally enters, the song takes off with great forward momentum, grounded in the steady backbeat we have been waiting for.

"Be My Baby" — Ronettes — 1963

E major



4/4

I	II ^m	V ⁷	I	II ^m	V ⁷
E	F ^{#m}	B ⁷	E	F ^{#m}	B ⁷

0:08 VERSE UNBALANCED SNARE PATTERN

(V/V^{Im}) (V/II^m) V/V V⁷

G ^{#7}	C ^{#7}	F ^{#7}	B ⁷
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0:22 PRE-CHORUS TENSION DRUM FILL

I VI^m IV V⁷

E	C ^{#m}	A	B ⁷
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4/4 RESOLUTION

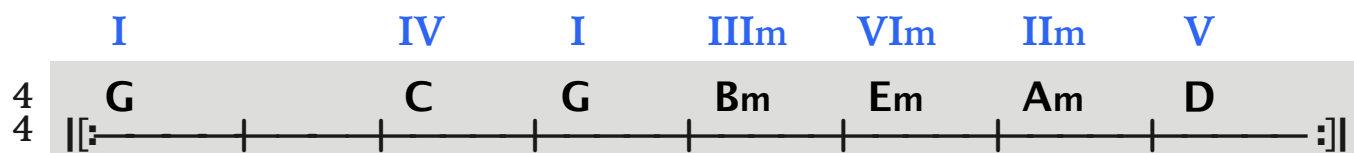
0:37 CHORUS STEADY, SOLID BACKBEAT

On the next song from Phil Collins, the I chord is avoided for 20 bars before the chorus returns. This is a long time away from home base, but the tempo is fast so we still can retain the memory of the I chord until the harmony is resolved in the chorus.

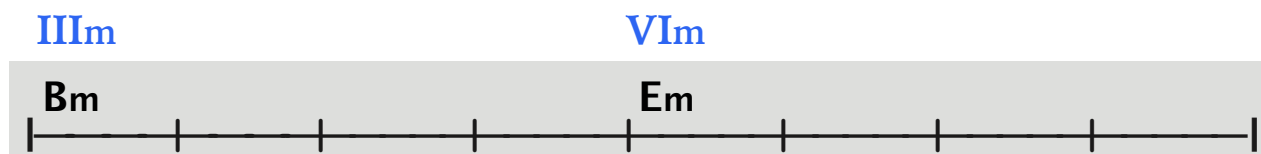
"You Can't Hurry Love" — Phil Collins — 1983

G major

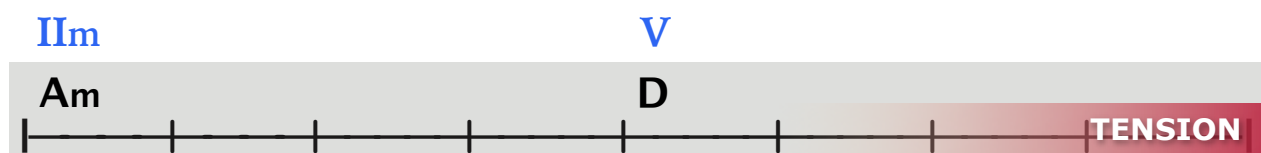




0:16 CHORUS



0:36 RELEASE



0:55 repeat CHORUS

RESOLUTION

Additional songs AVOIDING the I CHORD

1965	<i>Ticket to Ride</i>	The Beatles
1985	<i>Loverboy</i>	Billy Ocean
1991	<i>Something to Talk About</i>	Bonnie Raitt
2002	<i>Just Like a Pill</i>	Pink
2010	<i>Gonna Get Over You</i>	Sarah Bareilles
2011	<i>Rolling in the Deep</i>	Adele
2012	<i>Right Back Atcha Babe</i>	Tim McGraw
2014	<i>Revival</i>	Sara Evans