STRING DAMPING

By Douglas Niedt

Have you ever learned a piece and even though you are playing it quite well, noticed that something still doesn't sound quite right? You are playing all the right notes and the correct rhythms, but it just doesn't sound clean?

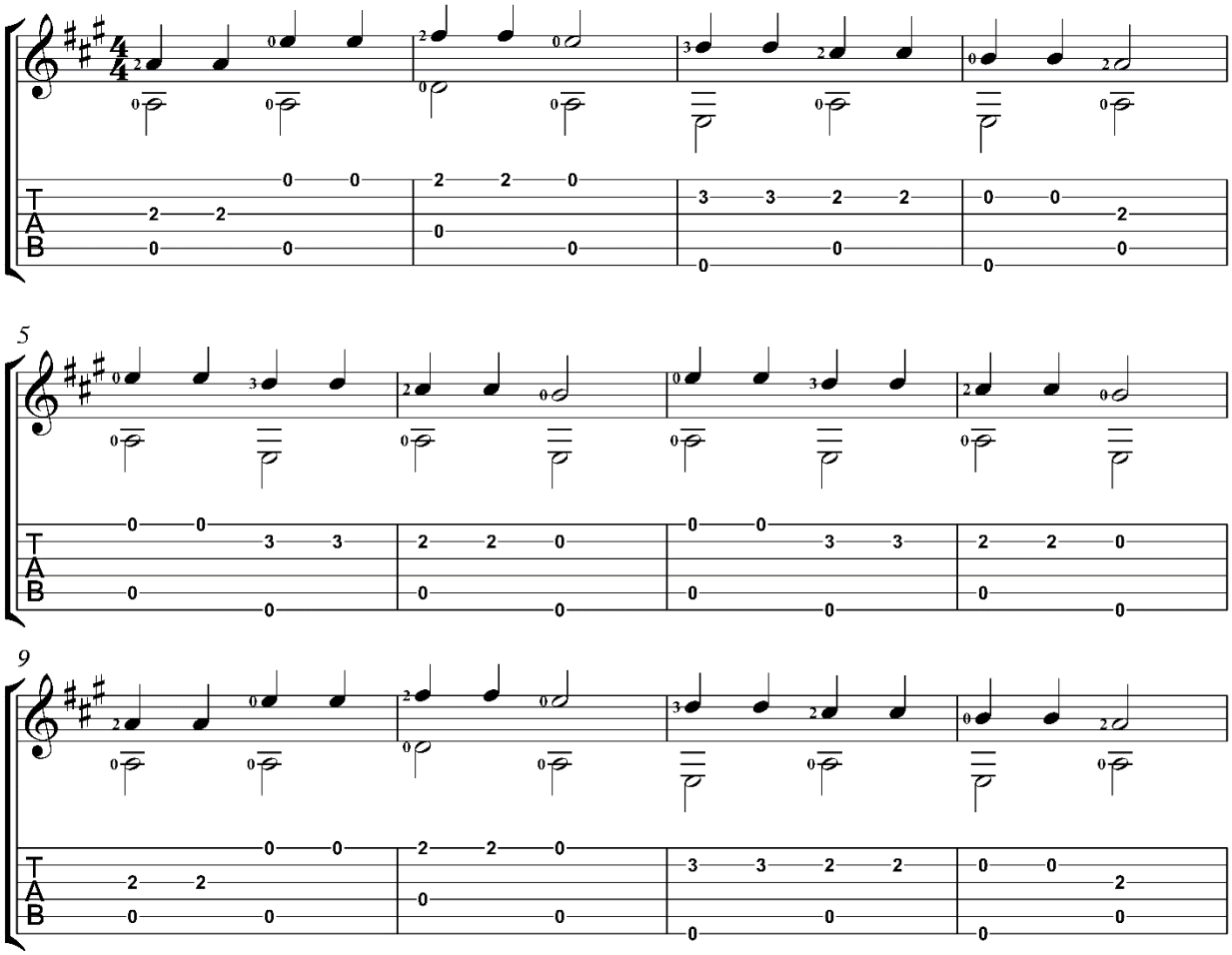
One of the steps of polishing a piece that you might have missed is the application of string damping throughout the piece. It is one of those details that contributes to the overall impression of how you sound. A great way to clean up your playing is to damp unwanted resonances and clashes of notes and harmonies.

Believe it or not, almost all the string damping techniques you need to master can be learned in my "virtuoso arrangement" of *Twinkle, Twinkle, Little Star*! Now don't get annoyed and mumble and grumble, "I paid $24 USD for these technique tips to learn a nursery rhyme song?" Trust me on this. Besides, Mozart wrote a famous set of variations (*Twelve Variations on "Ah vous dirai-je, Maman*", K. 265/300e) on the tune. So if it's good enough for Mozart, it's good enough for the rest of us.

Here it is, fingered in open position in the key of A major.

Example #1:

Twinkle, Twinkle, Little Star

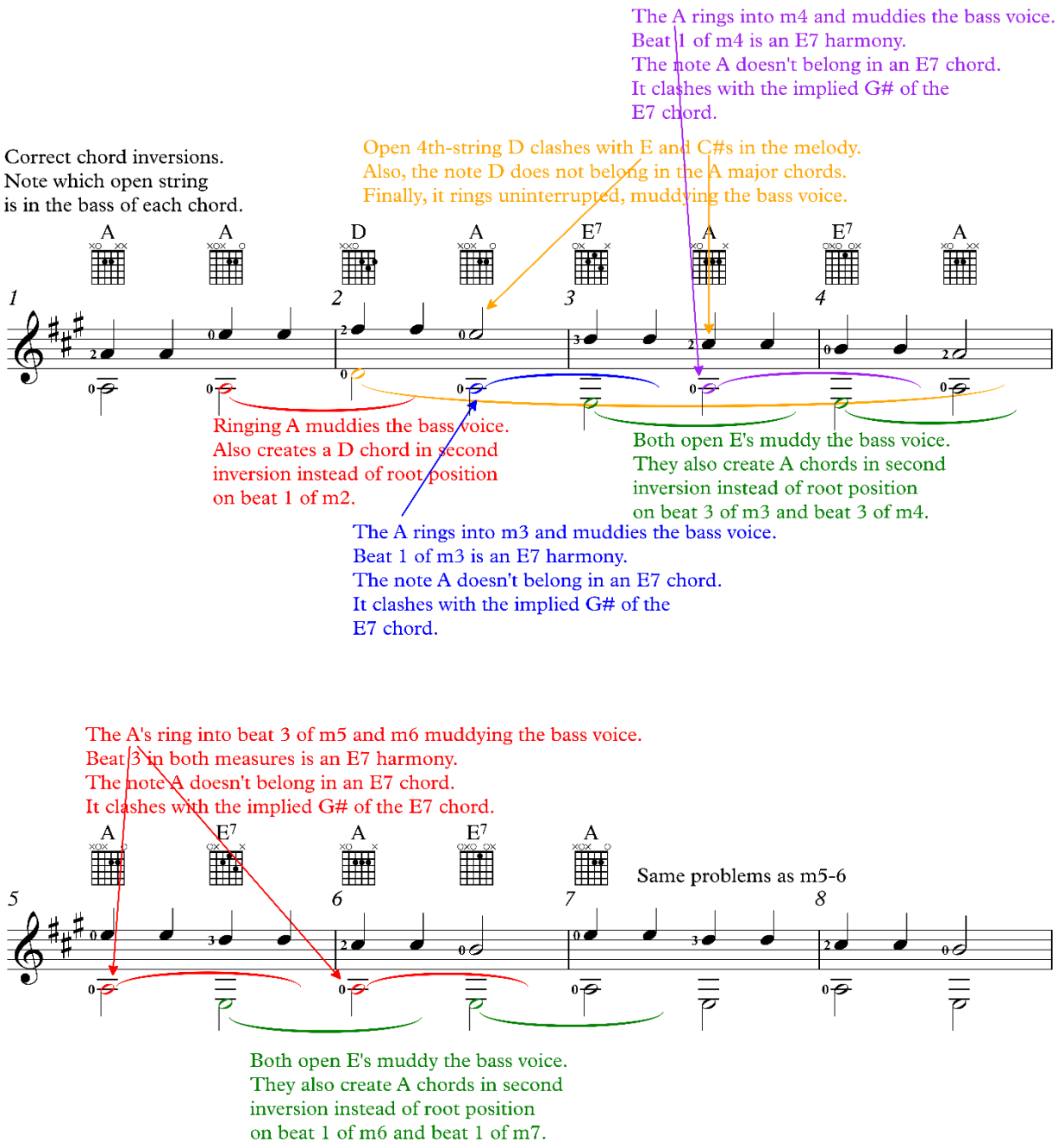


Ladies and gentlemen, we have serious problems. If we don't do anything about them, the open strings will freely ring. They will create a disaster of clashing notes in the melody, clashing notes between the melody and bass, a muddy bass voice, incorrect chord inversions, and general pandemonium.

Without string damping, here are the problems that are created in just the bass or lower voice!

Example #2:

Twinkle, Twinkle, Little Star. Problems in the bass voice.



Frightening isn't it? Visually you see a mishmash of ringing notes indicated by intertwining curved lines. This visual mishmash is heard as aural clutter and confusion. We hear general muddiness in the bass because the open E's, A's, and D's keep ringing freely throughout. Those ringing basses cause dissonances between themselves and some of the melody notes or the notes of the chord harmonies. They also produce incorrect chord inversions.

For those not familiar with chord inversions, here is a quick explanation. Basic major and minor chords are made up of three notes—the root, 3rd, and 5th.

The root of a chord is the name of the chord. A is the root of an A major, A minor, A7, etc. chord. E is the root of an E major chord, E minor chord, etc.

When you play a chord on the guitar, and play the root tone as the lowest or bass note, you are playing the chord in root position. By the way, it doesn't matter what you play above the bass note. It is solely the bass note that determines what the inversion is.

The 3rd of a Major chord is the 3rd note of the root note's major scale. If the root is C, the 3rd is E (C,D,E). If the root is A, the 3rd is C# (A,B,C#) because C is sharped in the A major scale. If the root is E, the third is G# (E,F#,G#) because G is sharped in the E major scale.

If you play a chord on the guitar, and play the 3rd as the lowest or bass note, you are playing the chord in 1st inversion.

The 5th of a Major chord is the 5th note of the root note's major scale. If the root is C, the 5th is G (C,D,E,F,G). If the root is A, the 5th is E (A,B,C#,D,E). If the root is E, the 5th is B (E.F#,G#,A,B).

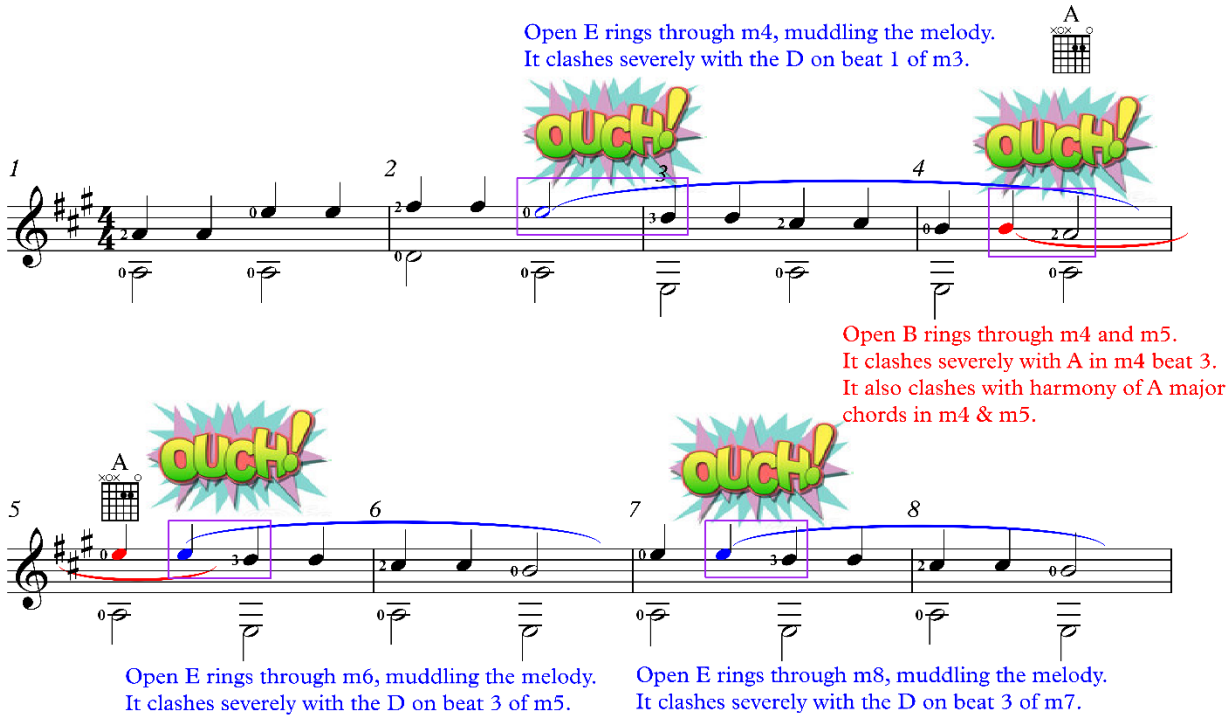
If you play a chord on the guitar, and play the 5th as the lowest or bass note, you are playing the chord in 2nd inversion.

Once again, if open bass strings are allowed to ring freely, they will often change the intended inversion of the chord harmonies in the passage.

Here are the problems created in the melody or upper voice.

Example #3:

Twinkle, Twinkle, Little Star. Problems in the melody or upper voice.

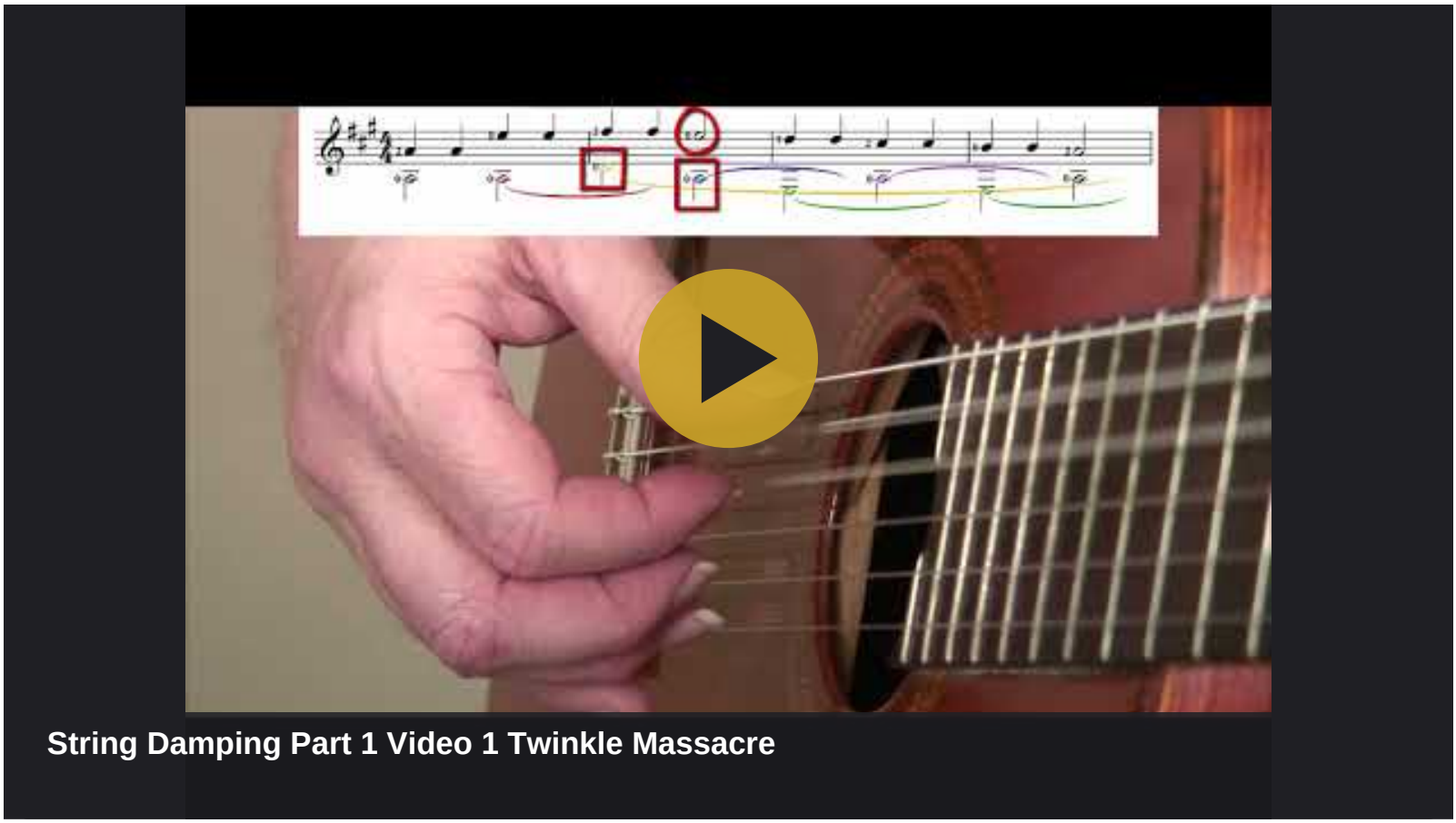


If the first-string open E's and second-string open B's are allowed to ring, they will produce ugly dissonances with the notes around them.

Remove young, impressionable children from the room and watch this horrifying video, "The Massacre of *Twinkle, Twinkle, Little Star*.

Video #1:

NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.



If all these problems occur in a simple 12-bar song such as *Twinkle*, imagine the problems you will encounter in standard repertoire pieces!

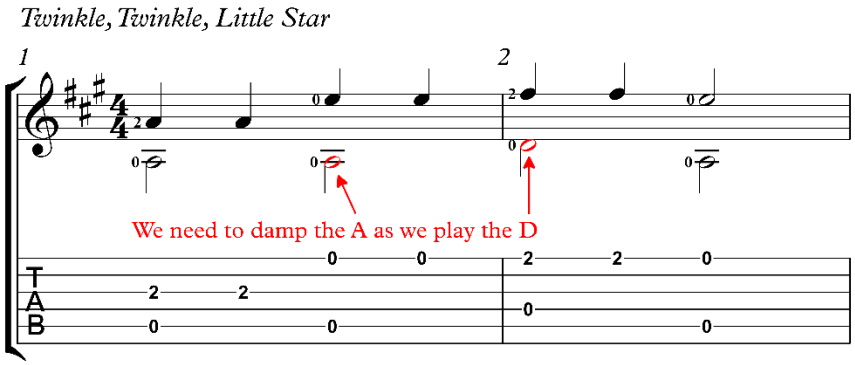
So, what do we do to fix all this ghastly carnage? String damping to the rescue.

CLEANING UP THE BASS

Going from a lower bass string to a higher bass string (that's pitch, not a spatial reference)

The thumb does most string damping for the bass register. Let's look again at *Twinkle*.

Example #4:



As we go from measure #1 to measure #2, we need to damp the lower A string as we play the higher D string.

When going from a lower bass string to a higher bass string, we can use two different right-hand methods to damp the lower string. Note that when I say "low" and "high", I am referring to pitch not space.

Method #1: Damping lower string X *after* plucking higher string Y

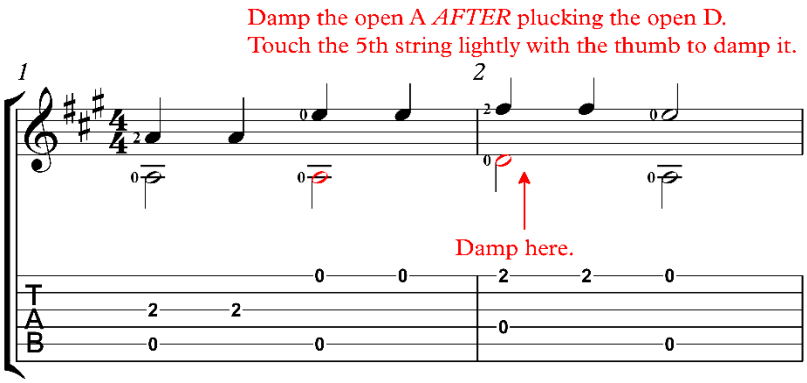
Most teachers recommend that you play the lower bass string, proceed to pluck the higher bass string, and then immediately go back and damp the lower string by touching it *lightly* with the thumb. There is no reason to press hard into the string to damp it.

Be very careful to damp the string with the flesh only of the thumb. Do not allow the nail to touch the string when executing a string damp. It will produce a raspy buzz. We are trying to eliminate extraneous sounds, not add to them!

In our example, you play the D (and F# with it) on beat #1 of measure #2 and then damp the open A immediately *afterward*, touching the 5th string lightly with the thumb.

Example #5:

Twinkle, Twinkle, Little Star



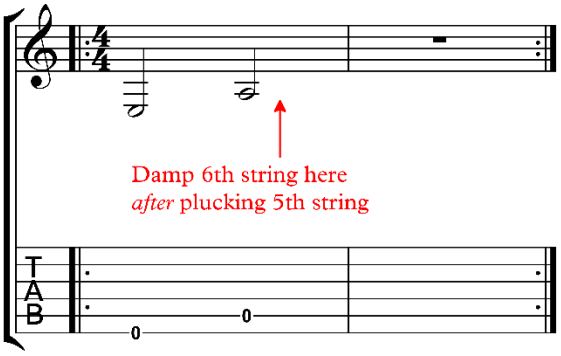
With this method, you might ask, "If you damp the offensive note *after* playing the next note, aren't they going to ring together a little bit? Aren't we trying to prevent that?" The answer is yes. That is the reason I'm not a big fan of this method. With this technique it is important to damp *immediately* after playing the D to minimize the time the two notes ring together.

If you are new to this, I recommend practicing the technique on open strings as shown in the following exercises. I have also notated what this technique actually sounds like.

Example #6:

Practice damping lower string *after* plucking higher string:

All notes plucked and damped with thumb



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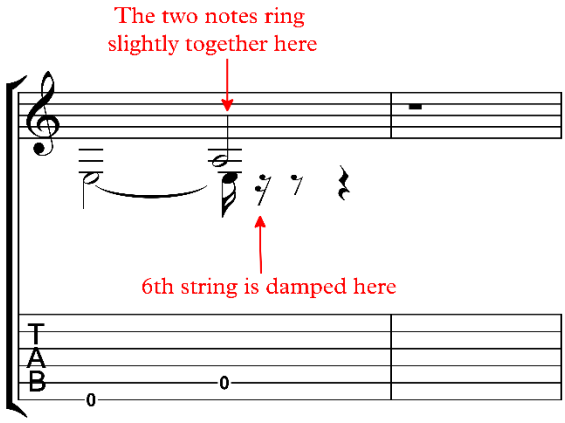
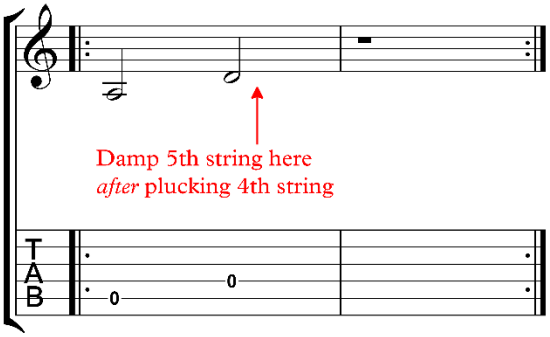
Sounds like:



Practice damping lower string *after* plucking higher string:



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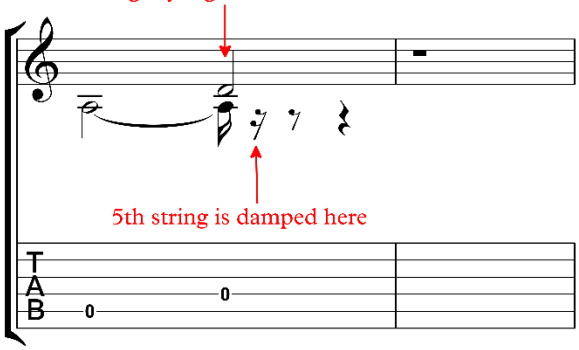
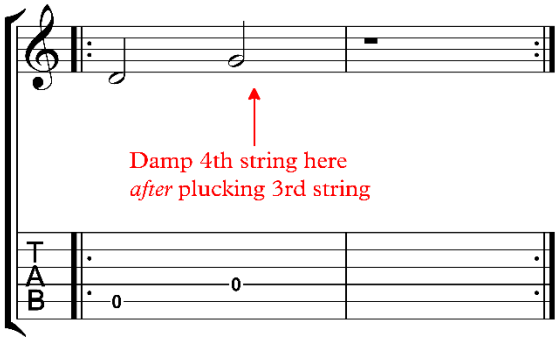
Sounds like:



Practice damping lower string *after* plucking higher string:



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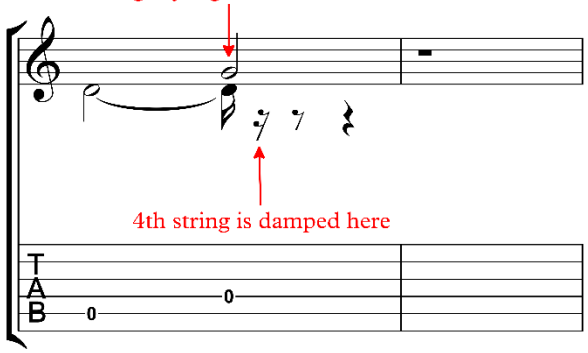
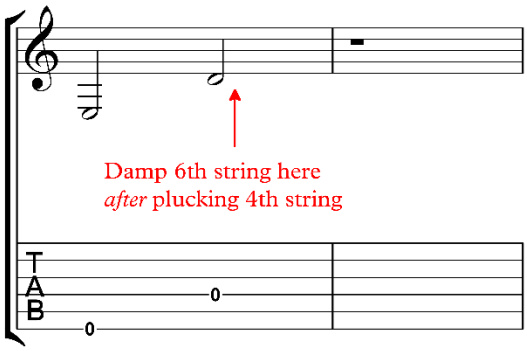


Also practice damping on these wider jumps:



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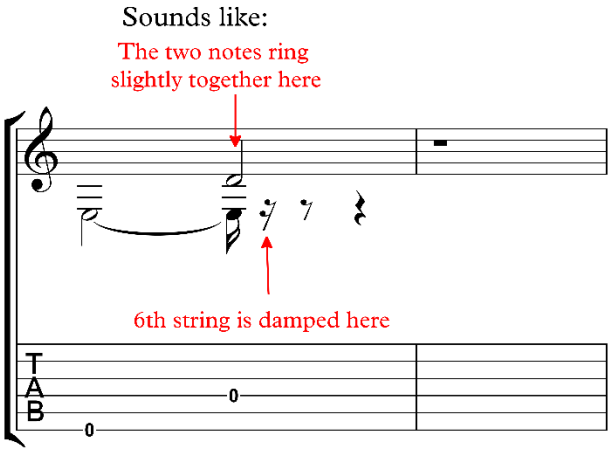
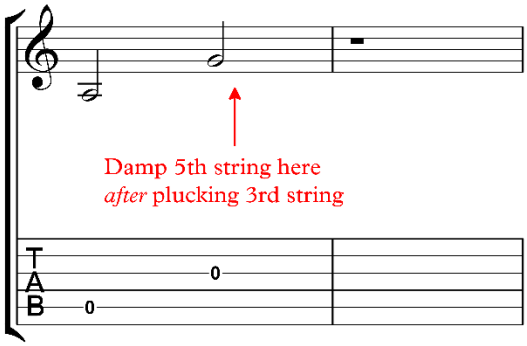


Also practice damping on these wider jumps:



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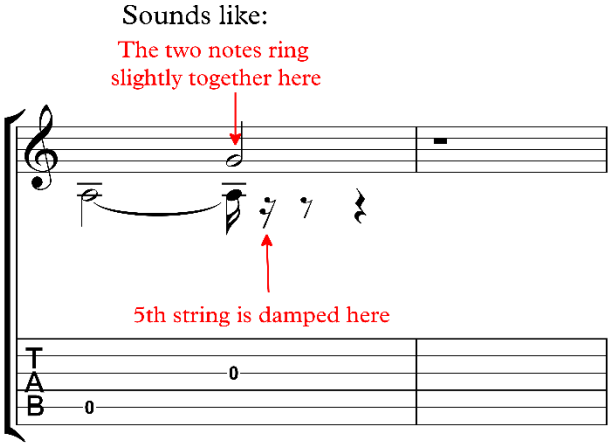
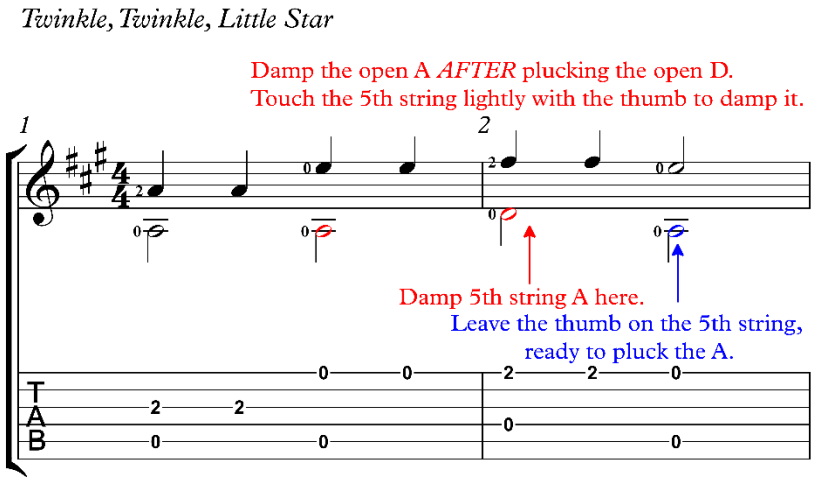


Watch video #2 on how to execute this technique. By the way, for this one you can allow the children to come back into the room…

NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.

Now that you have a better idea on how to execute this technique, try it again on this passage from *Twinkle.*

Here is example #5 again:



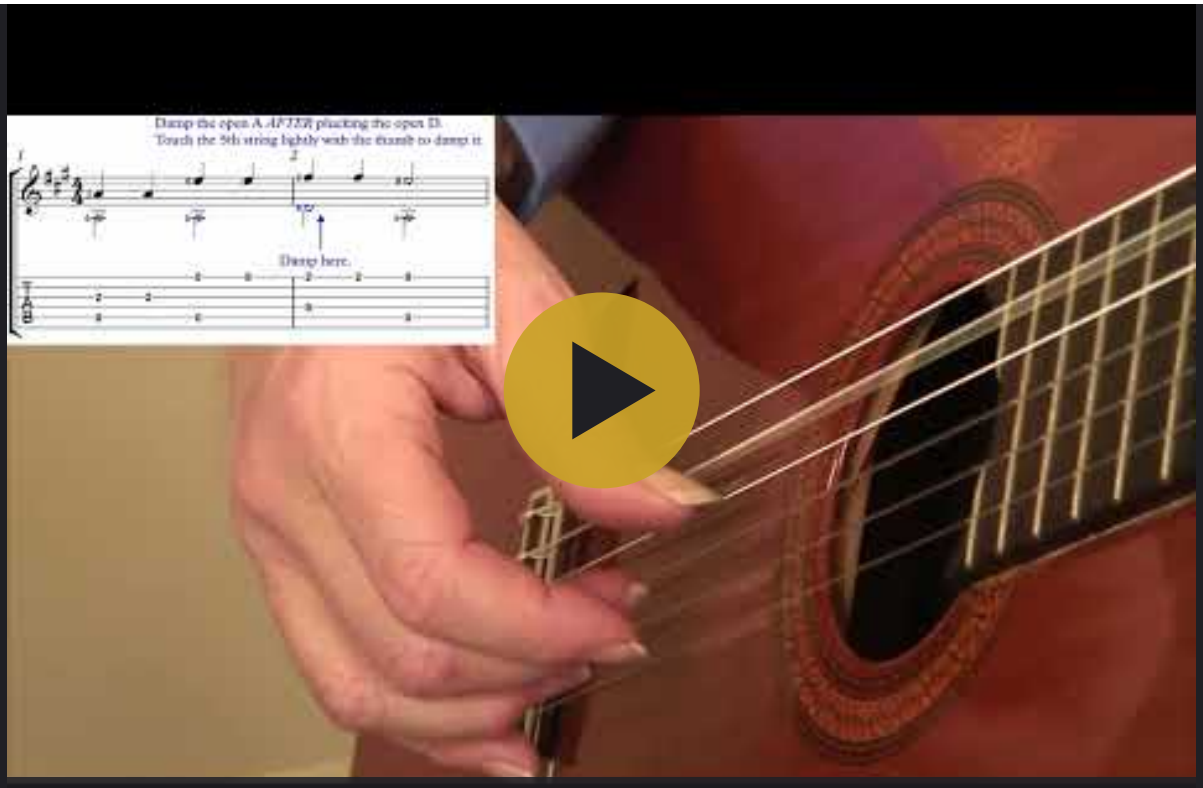
Where does my thumb go after the damp?

The damping motion with the thumb is often quick. Touch the string to damp, then remove the thumb from the string or bounce off the string quickly. That way, the thumb is ready to move on to play another string. In fast passages it is very important to damp the string quickly and get the thumb off the string quickly. And again, always use a light damping movement. There is no reason to press hard into the string.

However, as in the *Twinkle* example above, if the thumb damps a string it is going to play again immediately afterward, leave the thumb on the string. That way it is prepared or planted, ready to pluck that string.

And you thought playing *Twinkle, Twinkle, Little Star* was for sissies. Go ahead. Make my day. Watch video #3:

NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.



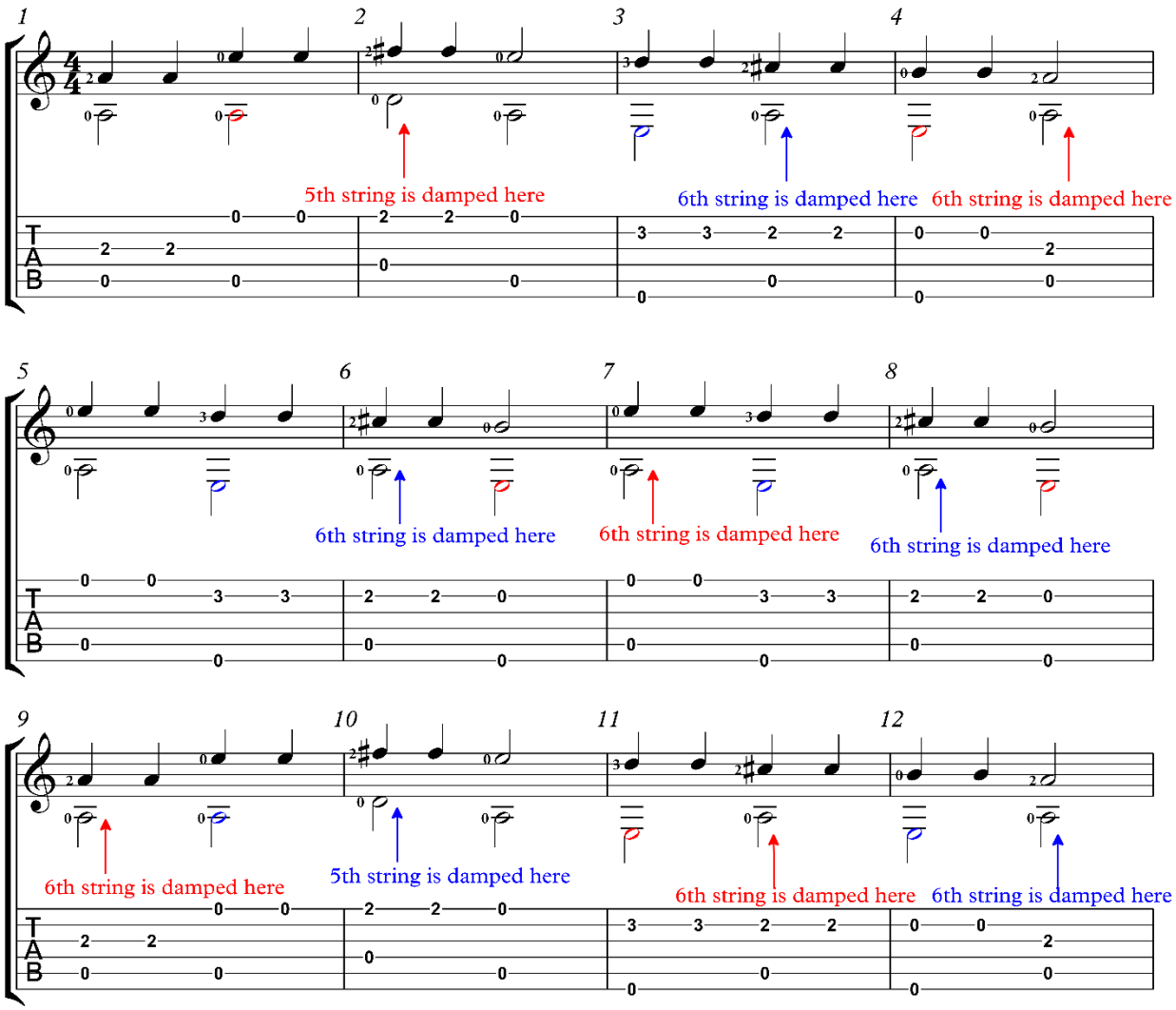
String Damping Part 1 Video 3 Twinkle String Damp m1-2

Here is the entire piece with the string damps marked. Note that these are only the string damps going from a lower string to a higher string. We will cover how to do the damps going from a higher string to a lower string in a later section of this technique tip.

Example #7:

Twinkle, Twinkle, Little Star Damping

Solutions for Bass Voice Damping
Damping lower string X after plucking higher string Y:



Watch my masterful rendition of *Twinkle* in video #4:

NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.

Speed Matters

When we examine a piece to find potentially offensive notes that might muddle a part, create clashing dissonances, incorrect chord inversions, and other nasty phenomena, we should also consider the tempo of the piece. There are three reasons for this:

1. In general, in a fast piece, the negative effects of ringing bass notes are more noticeable. The notes don't have as much time to decay so their presence is more clearly heard.

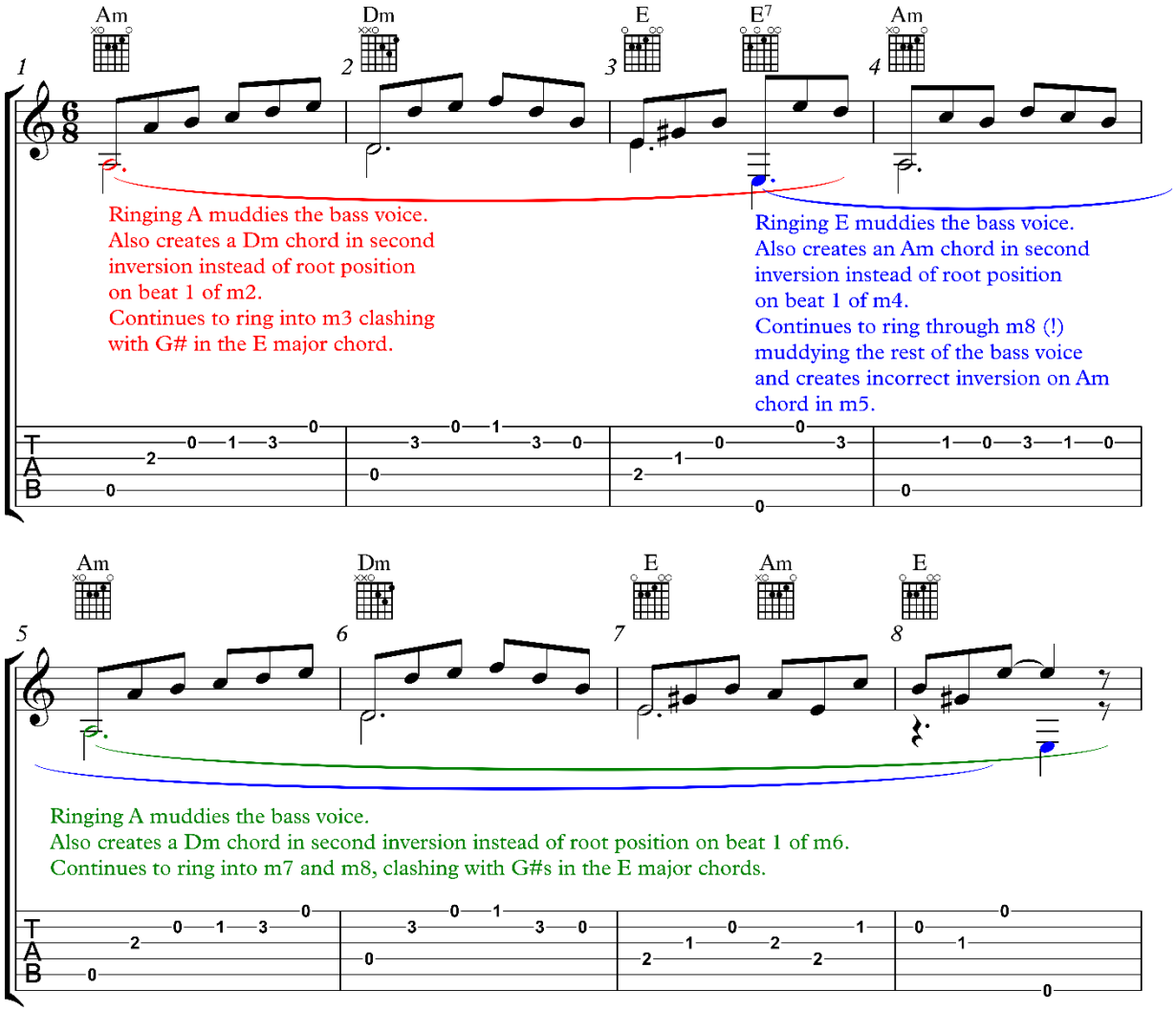
2. The tempo will determine the exact moment when a note should or can be damped.

3. The tempo of a piece will determine which technique to use to damp a note.

Let's look at a little more ambitious piece and examine two aspects of how tempo affects string damping. It is a fairly simple piece, but look at all the problems in the bass voice.

Example #8:

Introduction to the Study of the Guitar, Op. 60, No. 5 (Fernando Sor) Problems in the bass voice:



To observe the first aspect, play this Sor piece at a very slow tempo. Listen to the ringing bass notes. At a slow tempo the bass notes have time to decay. Therefore, the clashes produced by the low A's against the G#'s in the E major chords are not real noticeable.

However, the faster you play the piece, the basses have less time to decay. Their sustain is heard much more clearly. The clashes and mud are far more apparent.

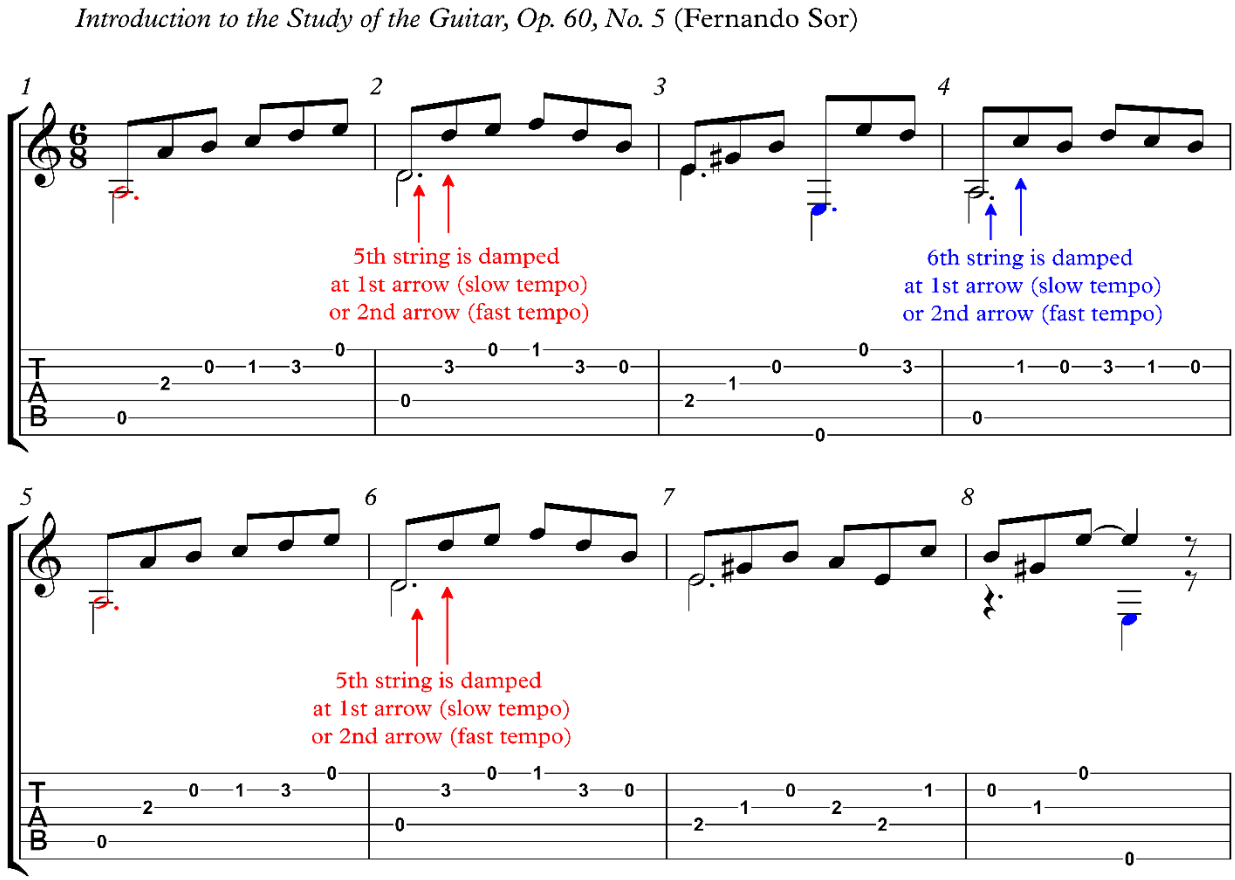
Watch and listen to Video #5 as the forces of tempo and string sustain battle to the death! (I'll say anything to get you to watch these videos.)

NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.

String Damping Part 1 Video 5 Effects of Tempo on String Sustain

The second aspect to consider is that if we use our technique of damping lower string X *after* playing higher string Y, the tempo determines the moment when we damp the string.

Example #9:



Remember, we want to damp the offensive note on the low bass string X as quickly as possible after playing the next bass note on the higher bass string Y. At a slow tempo it is easy to damp the offensive note *immediately* after playing the second bass note. For instance, in measure #2 we can damp the 5th-string A (ringing over from measure #1) quite a bit before we play the following 2nd-string D in the upper voice.

However, at high speed there is not enough time to damp the 5th-string A before playing the 2nd-string D. Instead, we must damp the 5th-string A at the same time we pluck the D.

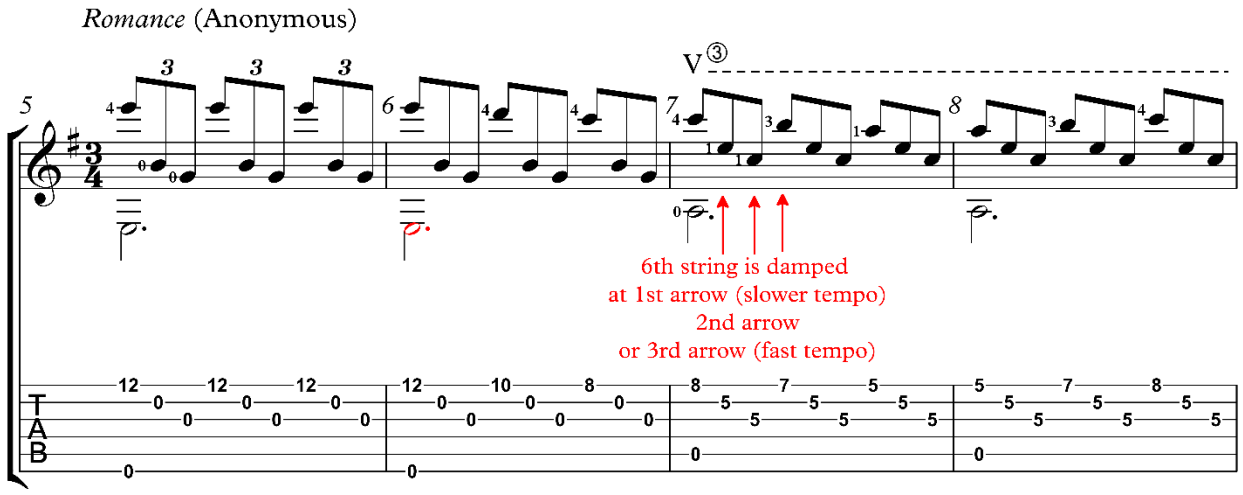
This is usually the case in most pieces or passages played at high speed. You will usually execute the string damp of the offensive bass string X as you pluck a note that follows the note on bass string Y. It could be the very next note as in the Sor example above, or it could be several notes afterward.

Watch me demonstrate how these principles operate in Video #6:

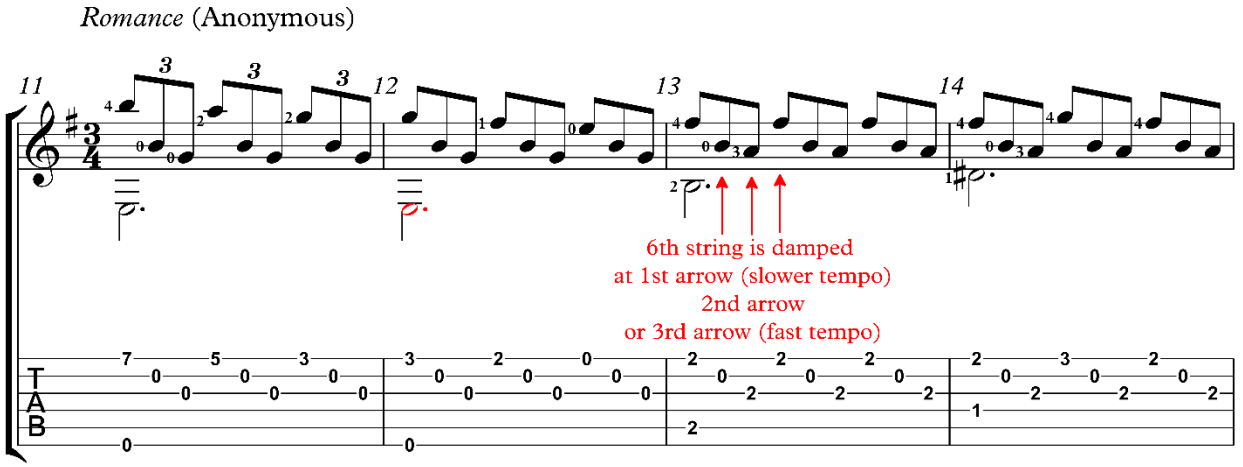
NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.

In the well-known anonymous *Romance* or *Romanza* or *Romance D'Amour*, etc., we have two passages requiring string damps.

Example #10a:



And example 10b:



Note that you have three options of when to do the damp in both examples. The choice is dependent on the tempo you choose to play the passage and your skill at coordinating the damping movement with playing the other notes.

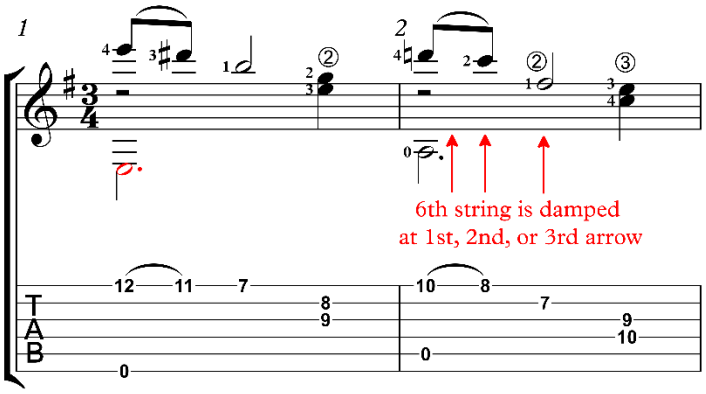
Watch me demonstrate the choices for measures #5-8 in video #7:

NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.

Francisco Tárrega's *Adelita* presents a new problem. While tempo could be a consideration, for many players the slur in the upper voice will be the determining factor where the string damp of the low E is executed.

Example #11:

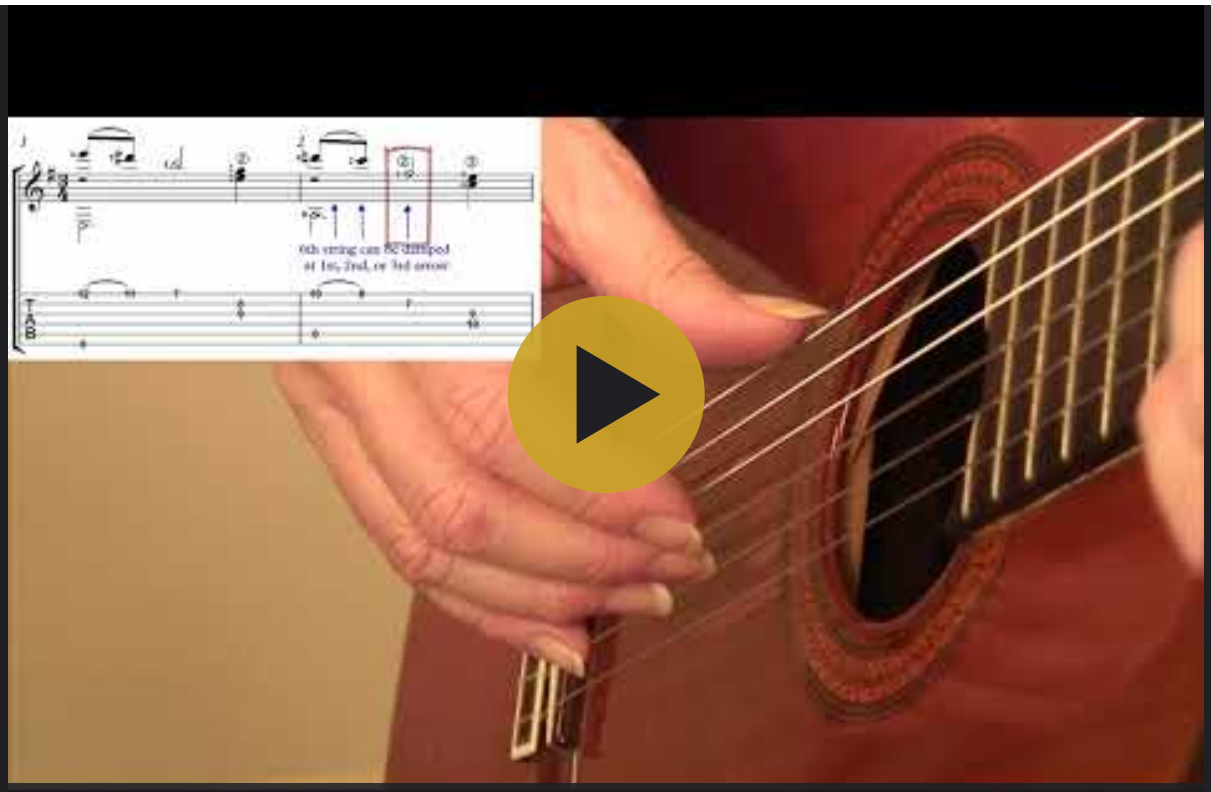
Adelita (Francisco Tárrega)



If *Adelita* is played at a slow tempo, it is possible to damp the low E immediately after plucking the low A and high D natural together. But that becomes increasingly difficult as the tempo is increased. The second choice is to damp the low E at the same moment the pulloff is executed. But many players will have difficulty synchronizing the string damp of the low E at the same time they do the pull-off to the high C. If that is the case, the simple solution is to damp the low E on the second beat as the 2nd-string F# is plucked. The downside of that is the low E rings a little longer against the low A.

Watch me unravel these mysteries of *Adelita* in video #8:

NOTE: To view on full screen, left-click to activate video. Then, right-click and select "Full Screen Multimedia". To return to normal viewing size, right-click and select "End Full Screen Media" or press the escape key ("ESC") on your keyboard.



String Damping Part 1 Video 8 Adelita Choosing When to Damp

The third aspect of how speed matters is that the speed of a piece will determine which technique we use to do a string damp. I will address that later after teaching you more string damping techniques.

Folks, we are just getting started. Still to come:

How to clean up the bass voice when going from a higher string to a lower string.

Left-hand string damping.

How the style of a piece affects the use of string damping

Observing written rests

Controlling sympathetic vibration and unwanted harmonics

Damping several strings at once

Damping on scales

Notation of damping

All explained and illustrated with great musical examples and stunning videos