PICKLOSER'S GUIDE TO DOUBLE STOPS AND REPEATING PATTERNS © By Laura Cauble

A double stop is part of a chord. To play a double stop is to "stop" two different strings on two of the chord's tones.

<u>PRELIMINARY INFORMATION</u> (If you hate this kind of stuff—skip this part; I think you'll get the idea without it.)

Below are some *major scales*. The "1" is the root note, from which comes the name of the scale. A whole tone is made up of two half tones. On the mandolin, each fret represents a half tone of change, higher or lower, depending on which direction. A whole tone (two frets) higher in pitch than the root note is the second tone of the major scale. A whole tone higher than the two note is the third tone of the scale. A half tone higher than the four note is the fourth tone of the scale. A whole tone higher than the four note is the fifth tone of the scale. A whole tone higher than the five note is the scale of the scale. A whole tone higher than the five note is the scale of the scale. A whole tone higher than the five note is the scale of the scale. A whole note higher than the sixth note is the scale of the scale. Finally, a half note higher than the seven note is the root note again, an octave higher than the original one note.

So, the pattern for major scales is: start on the root/1 note then, going up in pitch, it's whole, whole, half (that's tones 1, 2, 3, and 4), whole, whole, whole, half (that tones 5, 6, 7, and back to 1 and octave higher). On the mandolin, on a single string, one would start on the root/1 note, and go up two frets, which would be two half steps, which is one whole step, to get to the 2 note. Then go up another whole step/two frets to get to the 3 note. (That's whole, whole.) Go up toward the bridge another one fret/half step to the 4 note; another two frets/whole step to the 5; another whole/two frets to the 6; another whole/two frets to get to the 7; and a final half step/one fret gets one back to the root note 1, an octave higher than the original root note.

Each scale maintains the same "spacing" between scale tones: whole, whole, half, whole, whole, whole, half. The numbers at the top indicate where the letter-named notes fall in the scale, which is named for the 1 note. (So the first scale is C major; the second scale is G major, *etc*.)

1	2	3	4	5	6	7	1
С	D	Е	F	G	Α	В	С
G	Α	В	С	D	Е	F#	G
D	Е	F#	G	Α	В	С#	D
Α	В	C#	D	Е	F#	G#	Α
Е	F#	G#	Α	В	C#	D#	Е
В	С#	D#	Е	F#	G#	A#	В
F	G	Α	Bb	С	D	Е	F
Bb	С	D	Eb	F	G	Α	Bb

One can chart notes on a fret board blank. Here are the notes charted for the first 15 frets. Some notes can have two names. An F# (F sharp), for example, is the same note as a Gb (G flat). For convenience, I've just used one of the possible names in the grid below. Also for convenience, I took the strings off this mandolin. Just imagine the 4 string courses running through the middle of each of the four rows.

F	F#	G	Ab	A	Bb	В	С	Db	D	D#	Е	F	Gb	G		
Вь	В	С	C#	D	E⊾	E	F	F#	G	Аь	A	Bь	В	С		
Eь	E	F	F#	G	G#	A	A #	В	С	C#	D	D#	E	F		
Ab	A	Вь	В	С	C#	D	D#	Е	F	Gb	G	А ь	A	Вь		

Here's G with note names:

	G		A	В	С		D		Е	F#	G		A	
В	С		D	E		F#	G		A	В	С		D	
Е		F#	G	A		В	С		D	E		F#	G	
A		В	С	D		Е		F#	G	Α		В	С	

Here's G with the scale tone numbers marked instead of the note names:

		1		2	3	4		5		6	7	1		
	З	4		5	6		7	1		2	3	4		
	6		7	1	2		3	4		5	6		7	
	2		3	4	5		6		7	1	2		3	

The 1, 3	, and 5	notes of	each	major	scale	make	up	the	major	chord.
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1	3	5
G	В	D
С	E	G
D	F#	А
A	C#	E

Major chord double stops are two of these major chord notes played together. Any two notes of a chord on adjacent strings can be used in combination for a double stop.

So, for example, G major double stops will use a combination of any two notes, choosing from G, B, and D. Here is a fret board chart for G major, just showing the Gs, the Bs, and the Ds.

	G			В		D			G			
В			D			G		В			D	
			G		В		D				G	
		В		D			G			В		

Here's the above example with scale tone numbers instead of note names:

	1			3		5			1		
3			5			1		3			
			1	2	3		5				
		3		5			1			3	

Look at the chart above for a moment. I'm sure you will quickly see patterns emerge. This may be all you need. Get some blank charts and a fret board diagram showing where all the notes are. Fill in a blank with the 1s 3s and 5s of each key, and you will see where all the major double stops are.

If you're like me, though, it's helpful to have a way to get one's mind around this in such a way that it will stick. A good mandolin buddy of mine and I were working on double stops. The greatest difficulty in trading ideas was how to talk about double stops to each other. So we gave them names. This helped me to learn the individual double stops and the patterns in which they occurred on the fret board. Perhaps you will find this to be true as well. First I'll go over the names, and then I'll show the patterns.

NAMES FOR DOUBLE STOPS

TINY (sometimes called "shorty")

Tiny is the double stop that has the 1 tone on the higher string and the 3 tone on the next lower pitched string, one fret closer to the nut, than the 1 tone. We called this DS form "TINY," because it's close together; it's the smallest double stop. It's the "tiny" part of a 3 finger major chord.

TINY can also be thought of as the part of the three finger chord that's closest to the nut. It's the TINY part of a three finger chord. Here's a three finger A chord. The A and the C# on the E and A strings is a TINY double stop.

		Α							
	С#								
			Α						

For the key of C, the 1 tone is C, the 3 tone is E, and the 5 tone is G. Marked below are some C notes on the mandolin. The 3 tone of the C scale (and every other major scale) can be reliably found relative to the 1 tone. There will ALWAYS be a 3 tone on the next lower-pitched string (if there is a lower string) exactly one fret closer to the nut.

				С							
	С		E							С	
Е						С			Е		
		С			Е						

Here are the same C double stops, using scale note numbers instead of letters.

				1							
	1		З							1	
3						1			3		
		1			3						

For every 1 note of every major key, the 3 note can be found on its left shoulder. Tiny is an easy double stop to find, if you know what key you are in and you know where the root note of that key is on the fret board. You can

make TINY by putting your middle finger on the root note. The 3 note will be on the next lower-pitched string, one fret closer to the nut. Put your index finger on it, and you have a TINY for that key's I chord/root chord.

In G, for example, the 1 is G, the 3 is B and the 5 is D, making up the G major chord, G-B-D, or 1-3-5. Wherever there's a G, a B is on its left shoulder. (Apologies to lefties. But you're probably used to reversing everything by now.)

		G								G		
	В						G		В			
				G		В						
			В					G				

Here are the same G double stops, using scale note numbers.

	1								1		
З						1		3			
			1		3						
		3					1				

Here's a fret board with some note locations marked. On the next lowerpitched string, one fret closer to the nut, is the major third of the note you started from. It also works in reverse; for any given 3 note, its root note can be found one string higher and one fret closer to the bridge.

	G		A			С		D				
В		C#	D		Е		F#					
		F#	G		Α							
		В		C#								

Here's another example. In the key of D, D is the 1 or root, and F# is the 3. I've marked TINY double stops for D. All the 1 notes are Ds. Sitting on the D's left shoulder is the 3 note of D major, F#.

					1					
		1		3					1	
	3							3		

 	 · ·····P				 	•1.		-,	•	•			
		1										1	
	З							1			З		
				1			3						
			3										

One more example. TINYs for the key of A. A = 1, C# = 3

THE TENT

The TENT is made up of two double stops, UPTENT and DOWNTENT. The TENT goes UP from the root/1 note to the 5 note, and down from the 5 note to the 3 note. Here's how to build your TENT. Between the 1 and the 3 notes on the same string are 4 frets, because the 3 is two whole steps higher than the 1. Wherever there is a root or 1 note, four frets up from that 1 note will be a 3 note. The 1 and 3 form the base of the TENT.

Between the 1 and 3 tones of a scale are two whole tones. So the 3 is 4 frets up (4 half tones up) from the 1.

	1	(2)	3						
			1	(2)	3				

Repeating the example above, B is the 3^{rd} note in the G scale. F# is the 3^{rd} note in the D scale.

	G		В						
			D		F#				

The 5 note sits right between these two notes on the next lower (in pitch) string. The 5 is on the adjacent lower (in pitch) string, two frets up toward the bridge from the 1, and two frets from the 3 closer to the nut. An UPTENT double stop is formed from going up the TENT from the 1 to the 5. A DOWNTENT double stop is formed going down the TENT from the 5 to the 3.

nei	.esc		01. 0	, maa	he ut	101	1-0, :	<u>5-D,</u>	ana	э-ь.			
		1	(2)		3								
		(4)	5		(6)								

Here's a TENT for G, made up of 1-G, 5-D, and 3-B.

Here's a C major TENT with note names. (1-C, 3-E, 5-G)

_	 		i~joi		••••			··· (·	/ -	,	,			
		С				Е								
				G										

Here's a D TENT. (1-D, 3-F#, 5-A)

		1		3					
			5						

Again, the TENT describes two double stops—UPTENT and DOWNTENT.

UPTENT

Anywhere there is a 1 or root note, that root note's major scale's 5 note is on the next lower (in pitch) string, two frets closer to the bridge.

	1				1					
			5			5				
1						1				
		5					5			

So the TENT goes UP from the 1 to the 5.

In the next example, D is the 5th note of the G scale. A is the 5th tone of the D scale. E is the 5th tone of the A. G is the 5th tone of the C scale. Make an UPTENT from the key's root note to the 5 note. This double stop form is really useful, as I will try to show later.

	G			С						
		D				G				
			Α				D			
					E			Α		

DOWNTENT

Wherever there is a 5, there is a 3 on the next higher (in pitch) string, two frets up toward the bridge. In this example, the G/E combination is the DOWNTENT double stop for C major.

				С		Е			
	С		E		G				
		G							

Here are those same two C major TENTs with scale numbers instead of note names. So the TENT goes DOWN from the 5 to the 3 on the next higher (in pitch) string. That combo of the 5 note and the 3 note is DOWNTENT.

				1		З			
	1		3		5				
		5							

The TENT gives two double stops—UPTENT and DOWNTENT. Here are three tents for G major. Three G/D or 1/5 or "UP-TENT" double stops, and three D/B or 5/3 or DOWN-TENT double stops. (Notice in the examples above and below that the 3 is also still sitting on the 1's left shoulder, showing you where a TINY is.)

	G		В						
		D			G		В		
		G		В		D			
			D						

And repeating the above example of Gmajor TENT double stops with scale numbers instead of note names:

	1		3						
		5			1		3		
		1		3		5			
			5						

TWO-SPACER

TWO-SPACER is the other part of a three finger chord. It's the part of the three finger major chord form, leaving off the note that's on the highest (in pitch) string.

Here's a three finger G chord. A G major TWO-SPACER uses the 3 note (which is B in the key of G) and the 1 note on the next lower adjacent string.

	G								
В									
		G							

Wherever there is a 3, there is a 1 or root tone on the next lower pitched string, three frets up. We've been calling this one "TWO-SPACER" because there are two empty spaces between the 3 and the 1 on the next lower string. (Yes, there are three frets to cross, but there are two spaces.) Here's that same G chord with scale numbers instead of note names.

	1								
3									
		1							

Here's the TWO-SPACER made up of the third tone of the G scale and the G scale root or 1 tone, which is of course, uh, G.

В									
		G							

This works everywhere on the mandolin. Wherever there is a 3 of the major scale, the scale root will be on the next lower (in pitch) string, three frets (or two spaces) up.

This example is again for G, using numbered scale notes.

			3							
3					1		3			
		1		3					1	

											1					
Her	re ar	e C (the :	IV cl	hord	of G	; maj	jor) ⁻	TWC)-SP	ACE	۶s				
											E					
		(C)				Е								С		
	Е								С				Е			
				С											С	

A major TWO-SPACERs (notice they are two frets up toward the bridge from the G TWO-SPACERS)

				С#					
	С#					A			
			A		С#				
							A		

D major TWO-SPACERs using scale tone numbers

 i~j¢i	 0		 	000	0.01						
3						?		3			
		1			3					1	
	3						1				
			1								

<u>BAR</u>

On the lower pitched string above every 5 major scale tone is a 1 major scale tone, and of course the opposite is true as well, on the higher pitched string below the 1 is a 5. This makes sense, since the mandolin is tuned in fifths. This 1 and 5 combination makes the double stop we call the "BAR," since it's often played with one finger covering both notes, as in a BAR(re) chord. It's also handy to remember that there's a "fifth" under the BAR (or over it, if you see it better that way.) Anyway, wherever there's a fifth, there's a BAR.

For example, G is the 5^{th} note in the C scale. It can always be found on the next higher (in pitch) string, on the same fret as the C.

	G						G		
	С						С		
		G							
		С							

 		 p.e, .	 000	0.0						
	5							5		
	1							1		
		5								
		1								

That same example, using scale tone numbers:

At first, I considered BAR to be important mostly as a place keeper or a way to keep myself oriented on the fret board. Now, however, I am finding it to be very useful itself as a double stop. It works as a major and a minor double stop, since there is no 3 note in it. It works in blues and "bluesy" applications, again because there' no 3 note. (For the same reason, UPTENT is very useful as well.) BAR on the lower two strings courses will work as a chop chord.

STRETCHY

The last major chord double stop is made up of the 5 and the 3. We had thought about calling it "Rootless," because it has no 1 tone in it, but DOWNTENT is also rootless and made up of the 5 and 3. As you know, 4 frets up from the 1 is a 3 and on the next higher (in pitch) string, right below the 1, is a 5. Put these two (the 5 on the higher-pitched string and the 3 on the lower string) together and you get "STRETCHY," so called, because you have to stretch a little to reach it.

			(3)		5				
		5			G		3		
		G		3					

D is the 5^{th} note in the G scale, and B is the 3^{rd} note. When the 5 is on the higher (in pitch) string and the 3 is on the lower string, you get STRETCHY. (When you use the 3 on the higher string, you get a DOWN-TENT. Notice that you can pivot on the 5 note between STRETCHY and DOWNTENT.)

 		 	<u>J</u>		 		 	 	-	 -	
	G										
				Е		G					
		G						Е			
					Е						

Here are three C major stretchies. G is C's 5^{th} tone; E is C's 3^{rd} tone.

G is the 5 note in the C scale, and E is the 3 note. Together, they are a "STRETCHY" doublestop. (Notice the G and E on the fifth and seventh frets. There's a DOWNTENT for C. You can pivot on the 3 note between STRETCHY and DOWNTENT.)

Here are STRETCHYs for A using scale tone numbers; 1, 3, 5 = A, C#, E. (You can use the open E string along with that C# on the fourth fret of the A string.)

						5			
	3		5					3	
5					3		5		
		3							3

ALL THESE DOUBLE STOPS RUN TOGETHER IN A REPEATING ORDER

These double stops, TINY, UPTENT, DOWNTENT, TWO-SPACER, BAR and STRETCHY, run together in order from the nut toward the bridge and then start over. Below, for example, are the G double stops found on the two highest strings. TINY first, then UPTENT-DOWNTENT, then TWO-SPACER, BAR, then STRETCHY and then back to TINY, followed by UPTENT.

	1		3		5			1		
3		5			1		3		5	

	G		В		D			G		
В		D			G		В		D	

Here are the double stops for C (made up of C, E, and G as 1, 3, and 5), also running lengthwise on the two highest strings. BAR, then STRETCHY, then TINY, then UP-TENT/DOWN-TENT, then two-spacer, and then BAR again.

	5			1		3		5		
	1		3		5			1		

Here's that example with note names instead of numbers.

	G			С		Е		G		
	С		E		G			С		

Here's D (D-F#-A / 1-3-5) on the two middle strings. TINY-UPTENT-DOWNTENT-TWO-SPACER-BAR-STRETCHY-TINY. (Notice that you could also double stop that F# on the D string with the open A string, which

would give you a STRETCHY D double stop.)

		D		F#		Α			D	
	F#		Α			D		F#		

Here's D on the highest two strings. TWO-SPACER, BAR, STRETCHY, TINY, UPTENT, DOWNTENT, and TWO-SPACER again

F#		Α			D		F#			
		D		F#		A			D	

Here's D on the lowest two strings. DOWNTENT, TWO-SPACER, BAR, STRETCHY, TINY, UPTENT, and DOWNTENT again.

		•							
	F#		Α			D		F#	
Α			D		F#		Α		

Keeping the double stop "order" in mind

TINY lives in a TENT TWO SPACEs from a BAR so he can STRETCH out. If it starts on Stretchy, you could use STRETCH lives in a TINY TENT TWO SPACEs from a BAR.

Also keep in mind that the 1 has a 3 on its left shoulder. TWO-SPACER needs a little STRETCH after it leaves the BAR. After it leaves the BAR, STRETCHY has a TINY attachment, and that's the long and short of it.

Practicing the Double Stops Pattern

(If you don't want/need any advice about practicing the pattern, skip this part.)

Play these up and down the fret board for various keys. The usefulness of knowing these double stops and how they fit together will become apparent.

Often the melody can be found by running the double stops up or down the fret board. You can also practice other techniques, such as tremolo, Monroe-like down strokes, or D-U-D triplets while practicing the DS pattern.

This was a good learning exercise for me. Pick a key. Find the double stop form that is nearest the nut. Run the pattern up the neck until you can go no farther, tremoloing all the way. Then do the same, using 8 down strokes per double stop. Repeat the tremolo version. Then do the down stroke version, but shorten it to 4 strokes per tremolo. Repeat the tremolo version. Go back to the down strokes, but just use 2 per double stop. Repeat the tremolo run. Then see if you can do it with one down stroke per double stop. Then do the same again, but starting with the highest (in pitch) DS and working everything down toward the nut.

It won't take you too long to internalize how the stops are connected. You will not want, however, to always run these in order when playing. So, I suggest you practicing skipping around between them. Another good exercise for me was to start with the DS closest to the nut and go up the neck only playing every other double stop. Then play the first one and the third one, and then play the first one and the fourth, and then the first and the fifth. Do this practicing tremolo or down strokes as you prefer. Listen to the intervals between the higher tones of the stops (which would generally be your melody note when playing) as you move between them. Then do the same thing starting with the highest feasible DS. Work the pattern down toward the nut.

I like to practice double stops in groups of I, IV and V chords. Whatever exercise I do for the I chord, I'll do for the IV and V chords. For example, I'll play through the G double stops, then run G's IV chord, which is C, double stops, and then run the V chord/D double stops. Then I'll run A, D, and E or C, F, and G. Your eyes will see the relationships; your ears will hear them. With practice, our brains will start sorting and cataloging for future reference.

I expect you will tire of this quickly. I did. But it's easy enough to run through the patterns for I, IV, and Vs however you like best every once in a while to make sure you won't have to think about it when you are improvising a break. If you know what chord is playing, you should be able to find a double stop for that chord and go up or down following the melody (or your muse). When the chord changes to the IV or the V, you'll know where else you can go.

DOUBLE STOPS CAN TELL YOU WHERE OTHER SCALE TONES ARE

Double stops will help you know where you are, not only in relation to other double stops (a subject that will be addressed further), but also in relation to other scale tones. Look at Up-Tent, for example. If you put your index finger on the 1 and your middle finger on the 5, you can play 5, 6, 7, 1, 2, 3, 4 of the scale without moving your hand. And this will always be true for any UPTENT and its related scale.

Here' UP-TENT for the key of C. I've marked the double stop (C and G) with note names, but the other nearby C scale tones are marked with scale note numbers.

	С	2	3	4						
	4	G	6		7					

Notice in the example above that, out of the up-tent double stop, you have the C pentatonic scale at your fingertips. (The pentatonic scale is made up of the 1, 2, 3, 5, and 6 notes of the major scale.)

Here's an example in the key of A. Again UPTENT is how you can locate the other scale notes.

	7	A	2	3					
	3	4	E	6					

Here's TWO-SPACER for A. A is the 1 note, C# is the 3 note. The other scale tones are shown with scale tone numbers. If you play the C# with your index finger and the A with your ring finger, you have the first 6 scale tones

(and the entire major pentatonic scale—1, 2, 3, 5, 6) at your finger tips, hardly moving your hand. This will be true for any TWO-SPACER and any major scale.

	С#	4	5	6					
			Α	2					

Here's a D STRETCHY. It has the 5 note (A) on the higher pitched string and the 3 note (F#) on the lower pitched string. The whole D pentatonic scale is there for you inside that STRETCHY double stop.

		À	6	7	1				
		1	2	F#	4				

THESE DOUBLE STOPS ALSO "STACK" IN REPEATING PATTERNS

Sometimes you don't want to go up and down the fret board with your double stops. Instead you may want to take them from string to string.

	G			С			Е		G		
	С		E			G			С		
Е		G				С		Е		G	
		С			E		G			С	

Here are C chord notes. Any two on adjacent strings are double stops.

For a moment, just look at the first 7 frets of the above example. You have a BAR at the top (starting on the lowest in pitch string), attached to a TENT. On the left side of the TENT there is a TWO-SPACER. The TENT is covering a STRETCHY. There's another STRETCHY on the other side of the BAR on top of the TENT. These relationships don't change. There is always a TENT shaped major double stop on top of the STRETCHY for the same chord (if there are enough strings underneath the TENT). Here are some ways to remember how the double stops "stack." All the following examples happen to be C major double stops, but these relationships are true in every key.

1	•/ !!		 	ο 1 α		opae	01.				
					1						
				3							
							1				
						3					

TINY lives on both ends of a two-spacer.

There's a BAR on top of the TENT

	1		3						
		5							
		1							

If you know there's a BAR on top of the tent, then you know there's a twospacer on the left side of the tent and a STRETCHY on the right. The BAR keeps them apart. (And remember, there's a TINY on the ends of TWO-SPACER.)

				1						
	1		3			5				
3		5				1				
		1			3					

There's always a TENT over STRETCHY, and STRETCHY starts out under the BAR floor.

	5								
	1		3						
		5							

TINY can always be found hanging on to the BAR.

					5				
					1				
				3					

A BAR keeps the TENTs together.

 	 	 		-					
			С			Е			
					G				
					С		Е		
						G			

TWO-SPACER lives on top of the TENT on the nut side of the BAR.

				С		Е			
			E		G				
					С				

And STRETCHY is on top of the TWO-SPACER, which is on top of the TENT on the nut side of the BAR.

				С						
			E			G				
		G				С				
					Е					

Here's the previous example using scale tone numbers. Anywhere you have an UPTENT on the highest (in pitch) two strings, there will be a TWO-SPACER for the same major chord on the two middle string courses. On top of the TWO-SPACER on the middle strings, just one fret closer to the nut, is a same major chord STRETCHY.

				1						
			3			5				
		5				1				
					3					

Once you know the double stop shapes and how they stack and connect, I think it's best to start thinking about and remembering them as a 1/3 (1 note and 3 note) or 5/3 or 1/5 double stop. I continue to think of them by name, but the name now helps me remember more information. TINY, for example, has a 1 on the higher (in pitch) string and a 3 on the lower string. STRETCHY has a 5 on the higher string and a 3 on the lower string. TWO-SPACER has a 3 on the higher string and a 1 on the lower string. This is important to keep you oriented on the fret board and thus better able to locate other scale tones.

I find sliding from TWO-SPACER to STRETCHY is often useful. The BAR doublestop is a good placekeeper. TWO-SPACER and STRETCHY live on either side of the BAR. Put your index finger on the F# and your ring finger on the D. Then slide the whole thing up, stretching a little, and stop when your index finger is on the A and your ring finger is on the F#. Why not the pinky on the F#? Because, you want to save it to make TINY without moving your hand. Where is it? The F#, which is the 3 of the D scale is sitting on its root note's left shoulder.

F#		Α							
		D		F#					

LOCATING THE IV CHORD DOUBLESTOPS DEPENDING ON WHAT I CHORD DOUBLESTOP YOU START FROM

I'm going to start with a lot of information, which will give you the tools to figure all of this out yourself. Understanding this stuff has helped my playing, and I think it will help yours. If you already know this, or would rather not know this, then skip to the last part for fret board grids that show some I, IV, V double stop patterns that I have found to be useful. If I've missed some good ones, please let me know, and I'll add those in.

Here, just for an example is the C major scale. C major is the I chord. The key of C consists of the following tones.

1	2	3	4	5	6	7	1
С	D	Е	F	G	Α	В	С

C's I chord (C major) consists of the 1, 3, and 5 tones, C, E, and G. C's IV chord (F major) consists of the 4, 6, and 1 tones, F, A, and C. C's V chord (G major) consists of the 5, 7, and 2 tones, G, B, and D. Here's a chart of the C scale, using scale tone numbers. The relationships among different scale tones as played on the mandolin remain the same, regardless of key. If there is a string available, *every* 1 scale tone on the mandolin has a 5 scale tone on the adjacent higher pitched string. On the lower adjacent string there is *always* a 4 tone. One fret toward the nut from the 4 tone, there will always be a 3 tone. There is only a half step between 3 and 4 tones, and there is only a half step between 7 and 1 tones, so 3s and 4s are on adjacent frets, as are 7 and 1 tones.

4		5		6	7	1		2	3	4		5		6	
	7	1		2	3	4		5	6		7	1		2	
	3	4		5	6		7	1	2		3	4		5	
	6		7	1	2		3	4	5		6		7	1	

Here's a chart of C major scale's I chord, which is of course C major, which consists of the 1, 3, and 5 tones of the C major scale, the notes of C, E, and G. Fret any two of these tones on adjacent strings, and you will have a C major double stop.

	5			1			3		5		
	1		3			5			1		
3		5				1		3		5	
		1			3		5			1	

Next is shown the F major scale charted using scale tone numbers. The relationships among the scale tones are the same as in C major. Where there is a root / 1 tone, there is a 5 tone on the adjacent higher pitched string and a 4 tone on the adjacent lower pitched string. There's always a 7 one fret closer to the nut from the 1. Perhaps you cannot or don't want to memorize where every individual note is on the mandolin. You can memorize key tone relationships. The more familiar you are with where these tone numbers fall in relation to other tone numbers, the easier it will be to get yourself around the fret board without guessing.

1 11	Gjor		cuic	10110	num								_		
1		2		3	4		5	6	7	1		2		3	
4		5		6		7	1	2	З	4		5		6	
	7	1		2		3	4	5	6		7	1		2	

F major in scale tone numbers

3 4 5 6 7 1 2 3 4	5
-------------------	---

F major double stops can be made using any two tones of the F major chord, F. A. and C. which are the 1. 3. and 5 tones of the F major scale.

	., απ	<u> </u>		, 1, 0	, 4110		<u> </u>		<u></u>			 	
1			3		5				1			3	
		5			1			З			5		
		1		3		5					1		
	3		5			1				3		5	

F major is the IV chord in the key of C major. A IV chord for any given major key consists of the 4, 6, and 1 tones of the key's major scale. Here's the C major chart again, showing where all the 4, 6, and 1 tones are:

4			6		1			4			6	
		1			4		6			1		
		4		6		1				4		
	6		1			4			6		1	

Yes. The 4, 6, and 1 tones of the C major scale, are the exact same tones charted as the 1, 3, and 5 tones of the F major scale. Whether you think of it as the 4, 6, and 1 of C scale, or you think of it as the 1, 3, and 5 tones of the F major scale, F major is always F, A, and C. Every time, in any major key, the 4, 6, and 1 tones of the I chord are the same as the 1, 3, and 5 tones of tones of the IV chord's major scale. Why I am pointing this out will become clear shortly.

 			J - · · -		 1					<u> </u>	 			
	7	1		2	3	4		5		6	7	1		
	3	4		5	6		7	1		2	3	4		
	6		7	1	2		3	4		5	6		7	
	2		3	4	5		6		7	1	2		3	

Here's G major scale on a fret board chart using scale tone numbers.

Here's G major's 1, 3, and 5 tones, which show you all	the G	double stops.
--	-------	---------------

	1			3		5			1		
3			5			1		3			
			1		3		5				
		3		5			1			3	

G major chord is made up of G, B, and D, which are the 1, 3, and 5 tones of the G scale. G major is also the V chord of C major. G, B, and D are the 5, 7, and 2 tones of the C major scale. Here's the C major scale chart, showing just the 5, 7, and 2 tones.

 	<u> </u>	<u> </u>		 	 			 				
	5			7		2			5			
7			2			5		7			2	
			5		7		2				5	
		7		2			5			7		

Yes. It's easy to see. The V chord is made up of the 5, 7, and 2 tones of the I chord's scale. The 5, 7, and 2 tones of the I chord's scale are the same exact notes as the 1, 3, and 5 tones of the V chord's major scale.

Okay, back to the initial example, C major. In the key of C major, you could figure out where all the I, IV, and V double stops are (and the relationships between them would be the same for any major key) just by using a fret board grid of the major key scale in which you are playing. For the C major example we are using, any combination of 1, 3, and 5 tones on adjacent string courses will be a I chord double stop. Any combination of 4, 6, and 1 tones on adjacent strings will be a IV chord double stop. Any combination of 5, 7, and 2 tones on adjacent strings will be a V chord double stop. (Bonus: any combination of 6, 1, and 3 tones on adjacent strings will be the vi, or relative minor chord double stop.)

Each of these major chord, I, IV, and V, double stops will follow the patterns discussed earlier. Looking at the two highest pitched strings on the chart below, see the 5/1 BAR for the I chord. It's followed by the 5/3 STRETCHY for the I chord, then TINY, UPTENT, DOWNTENT, TWO-SPACER, and BAR again. The IV chord double stops will be true to the pattern as well. Again on the E and A strings, see the 4/1 UPTENT on the 1st and 3rd frets. It's followed by a 1/6 DOWNTENT, then 6/4 TWO-SPACER, 1/4 BAR, 1/6 STRETCHY, 6/4 TINY, and 4/1 UPTENT. You can follow the same pattern with the V chord, using the 5, 7, and 2 tones. It starts with a 7/5 TINY on the 2nd and 3rd frets.

4		5	6	7	1		2	3	4		5	6	
	7	1	2	3	4		5	6		7	1	2	
	3	4	5	6		7	1	2		3	4	5	

6 7 1 2 3 4 5 6 7	1
-------------------	---

Where the 1 tone is will of course be different for each major key. The spatial relationships between scale tones on the fret board will remain the same, regardless of key. If you learn a I, IV, V double stop pattern in C, move that same I, IV, V double stop pattern two frets closer to the bridge, and it will be a I, IV, V double stop pattern for the key of D. Move it a fret closer to the nut, and you will have a I, IV, V pattern for the key of B.

From I's TINY to IV's BAR, TWO-SPACER, and STRETCHY:

TINY has a 1 note and a 3 note. The IV chord double stops that share a tone with the I chord double stops have a 1 note and a 4 note, or a 1 note and a 6 note. If you are mentally aware of where the 1 note is for the key in which you are playing, and aware that on the adjacent lower pitched string course there is **ALWAYS** a 4 note, then you will know where the BAR for the IV chord is. BAR is a great place keeper. Right on top of the I's TINY, you can find the IV chord's BAR.

A I chord/C major TINY is the 3/1 combination below. C's IV chord/F major's BAR is the 4/1 combination.

	1								
3	4								

(From hereon, I'm not trying to use any particular key as an example. What follows is true, regardless of key.)

On either side of the BAR double stop for a major chord is TWO-SPACER toward the nut and STRETCHY toward the bridge. So for every TINY shape of the I chord, you will know that where the related IV chord's BAR is. Because you know where the IV chord's BAR is, you know that the IV chord's TWO-SPACER is on the nut side of the BAR, and the IV chord's STRETCHY will on the bridge side of the IV chord BAR.

Look at the next chart. The "1" and the small "3" are the I chord's TINY. For every I chord TINY, you can find a IV chord BAR, and on either side of the IV chord BAR there will also be a IV chord TWO-SPACER and STRETCHY. This will be true regardless of what key you are in.

The I chord TINY will tell you where the IV chord BAR, TWO-SPACER, and STRETCHY are. On the lower adjacent string from the root/1 tone is always the 4 tone. (The 4 tone is also on the fret adjacent to the 3 tone of the I chord's TINY.) The 4 tone is the root note of the IV chord. The fifth of the IV chord (which is the 1 tone of the major scale of the key you are playing) is always on the same fret on the next adjacent higher pitched string. That is the BAR for the IV chord. Once you know where the IV chord BAR is, you know (or could know depending how the other stuff sunk in) where all the other IV chord major DS shapes are.

Here's the I chord TINY (the 1 and the little 3) showing you where the IV chord BAR, TWO-SPACER, and STRETCHY are.

6		1							
	3	4		6					

From the I UPTENT to IV BAR, TWO-SPACER, and STRETCHY

UPTENT for the I chord has a 1 note on the higher pitched string and a 5 note on the lower pitched string. Again, if you know where 1 is, you know that 4 is on the same fret on the lower adjacent string. Thus you know where the IV chord's BAR is, with TWO-SPACER and STRETCHY on either side of the BAR.

	6		1						
			4	5	6				

FROM I's TWO SPACER to IV chord double stops:

TWO-SPACER has a 3 note on the higher pitched string and a 1 note on the lower adjacent string. And again, if you know where that 1 is, you know that there's a 4 on the adjacent lower string. The 4 note and the note on the next higher string is the IV chord's BAR, and thus you know where the IV's TWO-SPACER and STRETCHY are.

		З							
		6		1					
				4		6			

If you remember that the I chord's TWO-SPACER has a 3 on the higher pitched string, you can locate the IV chord pattern on the same two string courses as the I chord's TWO-SPACER, by remembering that the 4 tone is on the fret adjacent to the 3 tone. The 4 tone is the root note of the IV chord. From the I chord TWO-SPACER to the IV chord UPTENT is a useful move. Also, with just a little shift of your hand, you can go from the I chord TWO-SPACER (3 and 1) to the IV chord TINY (4 and 6).

1		3	4		6					
		6		1			4			

The next chart again shows I chord's TWO-SPACER, consisting of the 3 on the higher pitched string and the 1 on the lower pitched string. Here, you can again key off the 3 note and head for IV chord double stops on higher pitched strings. Between the 3 tone and the 4 tone of a major scale there is a half step, which is one fret difference on the mandolin. The 4 tone is the root tone of the IV chord. Right below that root tone will be the 5^{th} of the root tone. So if you know where the I chord's 3 tone is, the 4 tone will be on the next fret closer to the bridge. This gives you the IV chord's BAR double stop. As discussed, when you know where the IV chord BAR is, you know the IV chord's TWO-SPACER will be on the nut side, and STRETCHY will be on the bridge side.

		6		1					
	4		3	4		6			
					1				

Next is A's TWO-SPACER, using scale letter names, A and C#. A's IV chord is D major, consisting of D, F#, and A. Move your index finger from that C#, the 3 tone of A major, to the D, the 4 tone of A major, and you have gone from I/A's TWO-SPACER to IV/D's UPTENT.

	С#	D							
			Α						

It works everywhere on the mandolin. I chord TWO-SPACER can move to IV chord UPTENT by moving one finger, one fret toward the bridge.

Here's C's I chord TWO-SPACER. Move your left index finger one fret toward the bridge and you have an F major (C's IV chord) UPTENT. Shift your hand slightly and you can catch the IV chord TINY—F and A.

				Е	F					
E	F			Α		С				
A		С								

Here's D's TWO-SPACER. D is the 1 note, F# is the 3 note. D's IV chord is G major, consisting of G, B, and D. You can go easily from D's TWO-SPACER to D's IV chord's UPTENT or TINY.

F#	G								
В		D							

LOCATING THE V CHORD DOUBLESTOP DEPENDING ON WHAT I CHORD DOUBLESTOP YOU START FROM

Just as an example, but not because it's special, I'll use C again.

1	2	3	4	5	6	7	1
С	D	Е	F	G	Α	В	С

C's I chord (C major) consists of the 1, 3, and 5 tones, C, E, and G. C's V chord (G major) consists of the 5, 7, and 2 tones, G, B, and D.

The I chord and the V chord share a note—the 5 tone. In the key of C, the 5 tone is G. To find V chord double stop, you will want to key off the I chord double stops that have the 5 tone in them: UPTENT, DOWNTENT, and BAR.

Here are the C major scale's I chord double stops (C major = 1, 3, 5 = C, E, G).

		5			1			3		5		
		1		3			5			1		
	3		5				1		3		5	
			1			3		5			1	

The 5 tone of the I chord is the 1 tone of the V chord. C's 5 tone (G) is C's V chord's (G major's) 1 tone (G). (I'd read that again until it makes sense.) C's 5 tone is G. C's V chord is G major. G major consists of G, B, and D. G, B, and D are the 5, 7, and 2 tones of the C scale. Next is the chart above redone with the 1s and 3s (the 3/E and the 1/C tones) made smaller and the 7s and 2s (Bs and Ds) of the C scale added. Combos of 1, 3, and 5 are I chord double stops. Combos of 5, 7, and 2 are V chord double stops.

	5			7	1		2	3		5			
7	1		2	3			5		7	1			
3			5			7	1	2	3			5	
		7	1	2		3		5			7	1	

1113	cuu	01 1		Jean		mbe	3 01	5,7	, unc		 				
		G			В			D				G			
	В			D				G			В			D	
				G			В			D				G	
			В		D					G			В		

Here are the G double stops using the chord's letter names of G, B, and D, instead of the C scale tone numbers of 5, 7, and 2.

The next chart below shows the C major scale's V chord (G major-5, 7, 2 / G, B, D) double stops. The 1 tone of C major (C) is marked with a small "1" and the 3 tone of C major (E) is marked with a small "3". Any combination of 1, 3, and 5 will give you a I chord double stop. Any combination of 2, 5, and 7 will give you a V chord double stop.

If you know where the root or 1 tone is for the key you are in, then you know where the BAR double stop for that key's I chord is. The BAR always has a 1 on the lower-pitched string and a 5 on the higher string. The 5 tone is the V chord's 1 tone. If you absorbed the earlier pattern stuff, knowing where the root tone of the V chord is will tell you exactly where the V chord double stop pattern sits on the fretboard.

	5			7	1		2	3		5			
7	1		2	3			5		7	1		2	
			5			7	1	2	3			5	
		7	1	2		3		5			7	1	

If you know where the 1 tone is, you know where the 5 tone is. The 5 tone is always on the adjacent higher pitched string, on the same fret as the 1 tone. Once you locate the 5 tone, you can locate all the V chord double stops. Just think of that 5 tone as a V chord "1" tone and start your double stop pattern there.

Here's an example, still in C. Wherever there is a 1/C, a 5/G is on the next adjacent higher pitched string. The V chord is made up of the tones 5, 7, and 2. I'll add those to the grid in smaller numbers.

		5		7		2			5		
	7	1	2			5		7			

You know that 5 tone is the root tone for the V chord. Just think about that 5 as being the 1 tone for the V chord and make your pattern. On the nut side of that G note, shown below as a "1" note for the V chord, will be TINY; toward the bridge you have UPTENT, DOWNTENT, TWO-SPACER, and BAR. You know on top of the 5 is another G, the G chord's 1 tone. You also know, from your knowledge of how the double stops stack, that you can match up that 5 note with a 3 note on the next lower adjacent string for a STRETCHY. And there's another TWO-SPACER on the nut side of the BAR on the D and A strings and another STRETCHY on the bridge side.

	1		3		5			1		
З		5			1		3			
		1		3						

From the I chord UPTENT to the V chord TWO-SPACER:

				С					
					G				

Here's a C major UPTENT. C is the 1 note, G is the 5 note.

G, the 5th tone of the C scale is also the root tone of C's V chord, G major (G, B, and D). If you are playing UPTENT for a I chord, you can move to a TWO-SPACER for the V chord by shifting your index finger one fret toward the nut. B is the 7 tone of C major, but it's the 3 tone of a G major chord. You don't have to remember that. If you know that any UPTENT consists of the 1 note on the higher pitched string and the 5 note on the adjacent lower string, then you know where to start making V chord double stops that have the V chord root (the I chord's 5 note) on them. TWO-SPACER has the 3rd tone of the major chord on the higher pitched string course and the root tone of the same major chord on the lower pitched adjacent string. Of course, you may just want to skip trying to *know* this and just remember that for whatever major key you are in, the I chord UPTENT can be turned

			В	С					
					G				

into the V chord's TWO-SPACER by moving your index finger one fret toward the nut.

This always works. I chord UPTENT to V chord TWO-SPACER. The 1/5 below is the I chord UPTENT. It happens to be D major's UPTENT. Move your index finger one fret toward the nut, and it will be on the 7 tone. (7 and 1 tones are always on adjacent frets.) The 7/5 combination is a V chord TWO-SPACER double stop, which in this case is an A major TWO-SPACER.

	7	1							
			5						

From the I chord UPTENT to the V chord STRETCHY:

The I chord's UPTENT has a 1 note on the higher pitched string and a 5 note on the adjacent lower pitched string. That 5 note is the root note of the V chord. On the next higher pitched adjacent string on the same fret, there will always be a tone that is the interval of a fifth higher than the note on the same fret on the lower pitched adjacent string. The combination of the 5^{th} tone of the root scale, and the 5^{th} of the 5^{th} of the root tone will be a BAR double stop for the V chord. On the nut side of the BAR will be the TWO-SPACER; on the other side of the BAR will be a STRETCHY for the same chord as that of the BAR.

			7	С	2				
					G		7		

From the I chord BAR to the V chord UPTENTand TINY:

A I chord BAR double stop will have a 1 tone on the lower pitched string and a 5 tone on the higher pitched string. So if you know where the BAR for the I chord is, then you know exactly where the 5 tone is. The I chord's 5 tone is the V chord's root tone. Knowing where the root tone is tells you exactly where the V chord's double stop pattern is on the fret board.

On this chart, the little 1 and the 5 make a I chord BAR double stop. Slide your index finger down to that 5 note, and you should immediately know that there's a V chord UPTENT on the bridge side and a V chord TINY on the nut side.

2			5		7		2		
		7	1	2			5		7

From the I chord DOWNTENT to the V chord STRETCHY:

DOWNTENT for the I chord will have a 5 tone on the lower pitched string and a 3 tone on the higher pitched string. You already know that the 5, 7, and 2 tones of the I chord's scale are the same exact notes as the 1, 3, and 5 tones of the V chord's scale. Directly below the 5 tone is the 5^{th} for that tone, which is a 2 tone for the I chord's scale. The 5/3 combo below is the I chord's DOWNTENT. The 2/7 combo is STRETCHY for the V chord.

			2	3				
			5		7			

CONVENIENT I, IV, V DOUBLESTOP MOVES

1.	F	rom	TIN	ΥI		(I =	13!	ō)					
					1								
				3			5		6				
To	STR	ETCH	-IY I	V (I	IV = ·	461)						
					1								
				3					6				
To	TWC	D-SP	ACE	RV((V = !	572	?)						
				7	1								
				3			5		6				

2. From TINY I

	6		1						
		3	4						

To TWO-SPACER IV

	6	7	1						
	2	3	4						

To DOWNTENT V

	6	7	1						
	2	3	4						

3. TINY I, STRETCHY IV, TWO-SPACER V

TII	NY I	1	3		5						
					1						
				3							

ST	RETO	СНУ	IV	4		6	1	-					
						1							
					3				6				

TW	'0-S	PAC	ER V	5		7	2						
					7	1							
					3			5					

I especially like the easy transition between the STRETCHY IV (1/6) and the TWO-SPACER V (7/5).

		7	1						
				5	6				

Remember, these relationships hold true across all major keys. If you are on a TWO-SPACER over a V chord, and the tune goes to the IV chord, no matter the key, you can slide your index finger one fret toward the bridge, and stretch your ring finger two frets closer to the bridge to make a IV chord STRETCHY. Same is always true in reverse: you can move from a STRETCHY IV chord double stop to a V chord TWO-SPACER by sliding your index finger one fret toward the nut and bringing your ring finger two frets toward the nut to make the V chord TWO-SPACER.

4. From UPTENT I (]	C = 1 3 5)
---------------------	------------

		1						
			5					

To V TWO-SPACER (V = 572)

		_		·						
		7	1							
					5					

To IV TWO-SPACER, BAR or STRETCHY (IV = 4 6 1)

	6	7	1						
			4	5	6				

5. From UPTENT I (I = 1 3 5)

		1						
			5					

To STRETCHY IV (IV = 4 6 1)

			-						
		1							
				5	6				

To V TWO-SPACER or V DOWNTENT or V STRETCHY (V = 5 7 2)

		7	1	2					
	2	3	4	5		7			

6. From TWO-SPACER I to IV and V TINYs

TWO-SPACER I (1 3 5)

		3							
				1					

TINY IV (4 6 1)

		3	4						
		6		1					

TINY V (5 7 2)

	-								
		3		5					
			7	1					

TWO-SPACER I (1 3 5) to UPTENT IV (4 6 1) is also good, and the TINY V (5 7 2) still works well.

		3	4		5					
				7	1					

7. From TWO-SPACER I to IV and V TINYs

UP-TENTI (1 3 5)

		1	2						
		4	5						

DOWNTENT IV (4 6 1)

		1	2						
		4	5						

-	 								
									1 1

TWO-SPACER or STRETCHY V (5 7 2)

	7	1	2						
		4	5		7				