

HAVELOCK HIGH SCHOOL
MARCHING BAND



PERCUSSION
TECHNIQUE BOOK

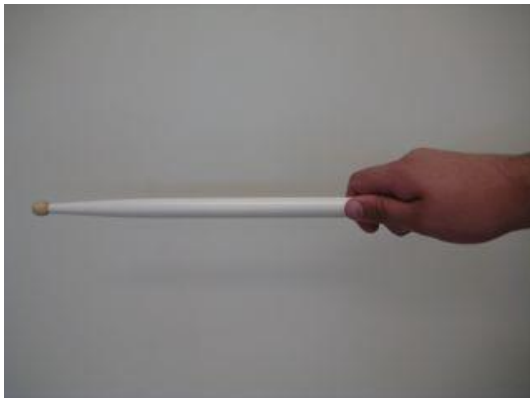
Snare Drum

Grip

The grip of a stick begins with the fulcrum. The fulcrum is the point at which the stick pivots in the hand, much like the center point of a seesaw.

The fulcrum is made between the pad of the thumb and the index finger. It should be made about a third of the way up the stick.

After the fulcrum is in place, loosely wrap the rest of the fingers around the stick. “German Grip” is where the palm is faced down toward the floor and “French Grip” is where the thumb is faced up completely. We want a combination, “American,” of both grips with the hand slightly sloped toward the outside of the hand.



GERMAN



“AMERICAN”



FRENCH

A little bit of the butt of the stick should stick out the side of the palm. The stick angle should not make the butt of the stick go under the wrist. The fingers should not be squeezed together tightly.

Playing Position

There are two basic positions; Tacet and Playing. To tacet means to rest, so the tacet position is the position that the hand is in while it is not playing. In tacet position, the sticks should be just high enough so that the index fingers can touch the back of the rim. The thumbs should not wrap around the sticks, they should both be on the back of the sticks.



When the sticks come out to play they should be in the center of the drumhead in a V. The sticks should always be directly beside each other, the same distance from the rim. They should be slightly less than 90-degrees. If only one stick is playing, the other stick should not move. The sticks should have a slight downward angle to the drumhead.



The arms should be relaxed and at the sides. They should not be far away from the torso, as is a common tendency. Relaxation is key.

Stroke

The playing motion is primarily from the wrist, but this does not mean that it is used exclusively. The arms and fingers are also used as part of the stroke, but the wrist is the primary point of movement. Larger muscles (arms) should be used for larger movements and smaller muscles (fingers) should be used for faster or smaller movements.

One of the most important factors in percussion is learning how to use and manipulate rebound. If a drumstick were dropped onto a drumhead freely it would have some rebound and it would bounce back. Rebound is physics and it's no use fighting physics. The rebound from any stroke should be used as part of the stroke, not a fighting force against the stroke.

The fulcrum is the primary point in the grip. The other fingers should **follow** the natural path of the stick. Start with the stick in an up position and throw the stick down into the head and allow the stick to rebound up to the same starting position. Be sure to let the stick bounce up from its' own momentum. Do not force it back up with your wrist. Let the stick dictate the movement. The stick should move straight up and down from the drumhead. Be careful to not let the stick slice from side to side.



There are 4 basic types of strokes: Up-Up, Up-Down, Down-up, or down-down. Each of these types of strokes use the rebound created by the initiation of movement from the fulcrum. The up-up stroke starts in the up position, strikes the head, and ends in the up position again. The up-down starts up then ends down, and so forth. Using rebound as part of **all** of the strokes is essential to make each stroke motion efficient. Do not use the wrist to control or restrict the movement of the stick. Each of these strokes should be practiced individually and in different combinations.

Heights

The entire section operates on a system of heights to allow a more defined and common language for dynamics. We operate on a system of 3, 6, 9, and 12. These numbers do not exactly correlate to inches off of the drumhead but they are close. These numbers roughly correspond to different dynamic levels. Strive to play with good sound quality at all heights, especially lower heights.

3" = piano

The stick barely moves above horizontal.
Play as low as possible with good sound.

6" = mezzo-piano

Think of this height as a loud 3.
It is only slightly louder than 3.

9" = mezzo-forte

The stick should be around a 45° angle
from the drumhead

12" = forte

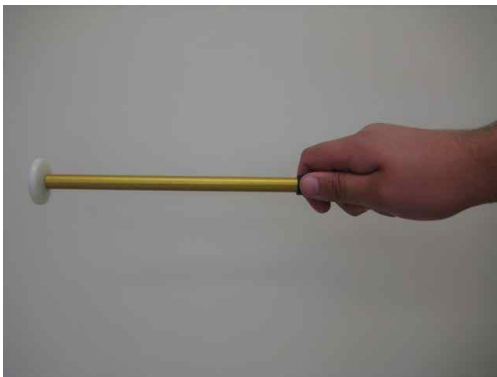
Full extension. The stick should rise to
being vertical, but not beyond.



Tenor Drums

Grip

The grip for tenor drums is fundamentally no different from the grip for snare drum. The grip begins with the fulcrum. The fulcrum is the point at which the stick pivots in the hand, much like the center point of a see-saw. The fulcrum is made between the pad of the thumb and the index finger. Tenors often play with many different implements, from sticks to mallets to brushes, etc... The location of the grip on the implement can change slightly depending on the weight and length, but the general is a third of the way up the stick.



GERMAN

After the fulcrum is in place, loosely wrap the rest of the fingers around the stick. “German Grip” is where the palm is faced down toward the floor and “French Grip” is where the thumb is faced up. We want a combination, “American,” of both grips with the hand slightly sloped toward the outside of the hand.



FRENCH

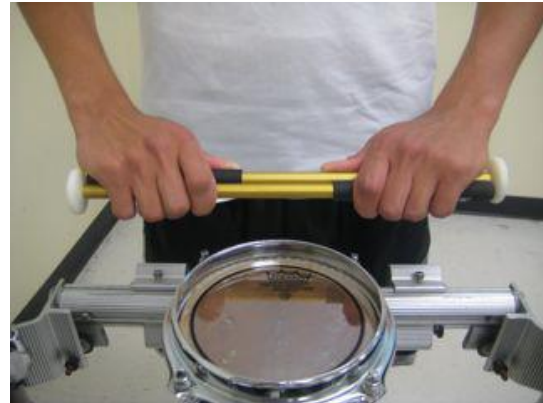


“AMERICAN”

A little bit of the butt of the stick should stick out the side of the palm. The stick angle should not make the butt of the stick go under the wrist. The fingers should not be squeezed together tightly.

Playing Position

There are two basic positions; Tacet and Playing. To tacet means to rest, so a tacet position is the position that the hand is in while it is not playing. In tacet position, the sticks should be just high enough so that the index fingers can touch the back of the rim of the spock (6") drum. The thumbs should not wrap around the sticks but should both be on the back of the sticks.



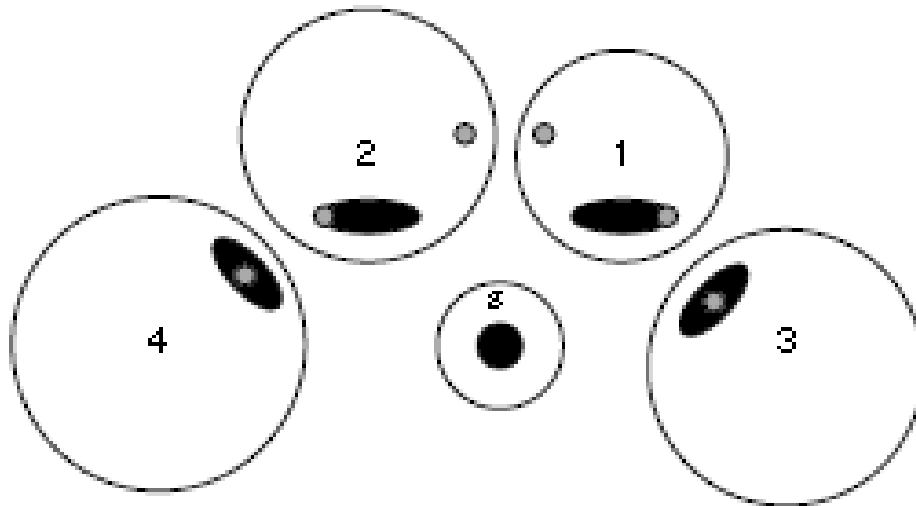
When the sticks come out to play they should come out to drums 1 and 2. This is the 'home base' position to be in while not playing. The sticks should have a slight downward angle to the drumhead.



The arms should be relaxed and at the sides. They should not be far away from the torso, as is a common tendency. Relaxation is the name of the game.

Playing Zones

On any drum, the shortest sound will come from playing directly in the center of the head. This is used for snare drum and bass drum in the marching battery, but tenors use different playing zones. The ideal spot for tenors is about an inch or two from the edge of the rim. This will produce a pingy sound that actually helps the drums project more. Playing in the center of a tenor head will produce a dead and thuddy sound that doesn't blend well with the rest of the battery, nor project effectively. The other reason for these playing zones is efficiency. Using these playing zones will make movement around the drums easier. Although leaning to play inside these zones can be aggravating, it is essential for good technique and sound quality. These zones should be played in regardless of the configuration on the hands/wrists. Good quality of sound is the primary goal above all else!



The black ovals are the typical playing zones for almost all situations. These zones will produce the pingy sound that is desired. The only exception is the spock drum in the center where playing in the center is necessary for projection. The zones are also located in these positions for efficiency purposes. They are the closest points accessible from any position on the drums. The gray circles are playing zones for sweeps. Sweeps are playing two successive notes with the same hand on different drums. Sweeps are a large part of the visual performance of any tenor line. The playing zones are located as indicated because they are the shortest distance from one drum to the adjacent drum.

Stroke

The playing motion is primarily from the wrist, but this does not mean that it is used exclusively. The arms and fingers are also used as part of the stroke, but the wrist is the primary point of movement. Larger muscles (arms) should be used for larger movements and smaller muscles (fingers) should be used for faster or smaller movements. For tenors, arms will inherently be used more because of the nature of lateral movement around the drums, but wrist should still be the primary joint of movement.

One of the most important factors in percussion is learning how to use and manipulate rebound. If a drumstick were dropped onto a drumhead freely it would have some rebound and it would bounce back. Rebound is physics and it's no use fighting physics. The rebound from any stroke should be used as part of the stroke, not a fighting force against the stroke. Again, because of the nature of playing tenors, use of rebound is essential to moving around the drums efficiently.

The fulcrum is the primary point in the grip. The other fingers should **follow** the natural path of the stick. Start with the stick in an up position and throw the stick down into the head and allow the stick to rebound up to the same starting position. Be sure bounce up from its' own momentum. Do not force it back up with your wrist. Let the stick dictate the movement. The stick should move straight up and down from the drumhead. Be careful to not let the stick slice from side to side. This can be especially difficult for tenor players to achieve because of lateral movement. Care should be taken to make sure EVERY stroke is straight up and down even if the wrists are crossed or if the arms are coming from another drum. It can help to practice slowly to be able to focus on each stroke more effectively. Also it can help to freeze the sticks in the up position to make it easier to see the stick before it strikes the head.



There are 4 basic types of strokes: Up-Up, Up-Down, Down-up, or down-down. Each of these types of strokes use the rebound created by the initiation of movement from the fulcrum. The up-up stroke starts in the up position, strikes the head, and ends in the up position again. The up-down starts up then ends down, and so forth. Using rebound as part of **all** of the strokes is essential to make each stroke motion efficient. Do not use the wrist to control or restrict the movement of the stick. Each of these strokes should be practiced individually and in different combinations. The lateral movement involved with tenor playing should not affect the fundamentals of stroke motion.

Since tenors play on different surfaces there are different types of motions. There are static movements, inner movements, and outer movements. Static movements are when the music is being performed on only one surface for any duration of time. Inner movements move from the outside left and right toward the center. These tend to be slightly more awkward to perform. An example would be a sweep from drum 3 to drum 1. Outward movements tend to feel more natural. However it can be easy to over shoot the outer drums and let the stick keep moving beyond its target after it strikes the head. It is a good idea to practice both ins and outs as often as possible

Cross-overs

Certainly a large part of what makes tenors fun to play and watch is the visual element of cross-overs. The important thing to focus on is to not let the cross interfere with the natural stroke motion; as if there were no cross involved. This is where playing zones are essential and careful attention must be paid to not overshooting the mark.

Focus on the wrist, not the hand. Do not let the crossing wrist bend up to accommodate the other wrist. The crossing stick should strike the head flat. Do not let the stick attack with a stabbing motion.

As seen in the photo below, players often pick their wrists up to cross over the other stick. This creates that stabbing motion that looks bad visually, produces a bad sound, and can cause discomfort to the player. **DO NOT DO THIS.**



Heights

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3" = piano

The stick barely moves above horizontal.
Play as low as possible with good sound.



6" = mezzo-piano

Think of this height as a loud 3.
It is only slightly louder than 3.



9" = mezzo-forte

The stick should be around a 45° angle
from the drumhead



12" = forte

Full extension. The stick should rise to being
vertical, but not beyond.



Bass Drum

Grip

The grip for bass drum is fundamentally no different from the grip for snare drum. The grip begins with the fulcrum. The fulcrum is the point at which the stick pivots in the hand, much like the center point of a see-saw. The fulcrum is made between the pad of the thumb and the index finger. The location of the grip on the implement can change slightly depending on the weight and length, but the general is a third of the way up the mallet.



The largest challenge for bass drum technique is overcoming the lack of gravitational help. Where snares and tenors have the advantage of their implements moving in the same direction as gravity, bass drums must strive to achieve the same grip and stroke while the playing surface is vertical. The mallet should be placed in the hand so that the bottom of the mallet is even with the hand and no mallet is sticking out the back.

A common tendency is to allow the thumb to slip off the stick and to be on top of the index finger. By doing this, the fulcrum cannot work properly. Make sure to keep the fulcrum in place while playing at all times. Putting the thumb in this position will not allow the wrist to bend properly and will negatively affect sound quality.



Playing Position

There are two basic positions; Tacet and Playing. To tacet means to rest, so a tacet position is the position that the hand is in while it is not playing. In tacet position the mallets should be against the rim with the mallets being straight up and down. The exact position on the rim changes depending on the size of the drum, but it will be around shoulder-height. Do not grab onto the rim with the thumb. The hand should be against the rim, but not “attached” so that they can move freely and quickly.



The player, not the drum, dictates the playing position. The drum should be adjusted to fit the person. The upper arm should be relaxed and at the sides. The forearm should be parallel to the ground and the mallet head should be in the center of the drumhead. For the larger drums, the upper arm may need to be pushed slightly forward, but this is the exception not the rule. The hands should be kept in this position at all times, even when not playing. When the drum is on a stand, it should be adjusted to be at the same height as when the drum is on the carrier. The sticks should have a slight inward angle to the drumhead.



Stroke

The playing motion is primarily from the wrist, but this does not mean that it is used exclusively. The arms and fingers are also used as part of the stroke, but the wrist is the primary point of movement. Larger muscles (arms) should be used for larger movements and smaller muscles (fingers) should be used for faster or smaller movements.



Since bass drums are sideways, the technique involved will feel slightly different from other “horizontal drums.” The technique should be the same as would be used on a snare drum; it’s just sideways. This concept is easier said than done, but that is the goal.

Because there will not be as much rebound from a bass drum, the wrist needs to be slightly more active in the stroke motion. This doesn’t mean that rebound isn’t used at all, but the wrist does need to supplement the rebound given from a bass drum.

There are 4 basic types of strokes: Up-Up, Up-Down, Down-up, or down-down. Each of these types of strokes use the rebound created by the initiation of movement from the fulcrum. The up-up stroke starts in the up position, strikes the head, and ends in the up position again. The up-down starts up then ends down, and so forth. Using rebound as part of **all** of the strokes is essential to make each stroke motion efficient. Do not use the wrist to control or restrict the movement of the stick. Each of these strokes should be practiced individually and in different combinations.

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3" = piano

The stick barely moves above vertical.
Play as low as possible with good sound.



6" = mezzo-piano

Think of this height as a loud 3.
It is only slightly louder than 3.



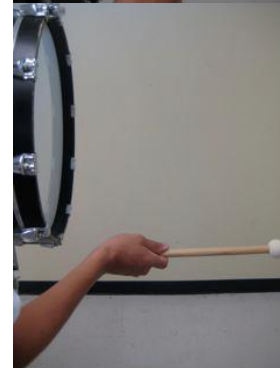
9" = mezzo-forte

The stick should be around a 45° angle from the drumhead



12" = forte

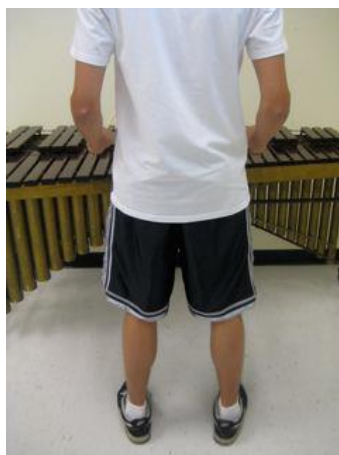
Full extension. The stick should rise to being vertical, but not beyond.



Keyboards

Posture/Stance

Before a note is played it is crucial that to understand how to stand behind the instrument. Many people jump right into playing without taking time to think about how they are standing and they end up getting into some bad habits that are difficult to after awhile. You should stand with your feet shoulder-width apart with your knees NOT locked. This will allow maximum mobility behind the instrument because weight will often need to be shifted from side to side or move the body all together. Do not cross legs, have weight on only one foot, or lean to one side.

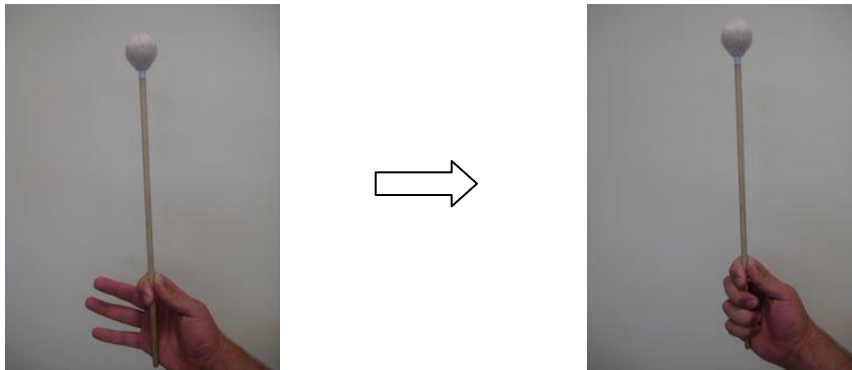


In addition to the legs and feet being set, good posture must also be a focus with the back, neck, and head. Motion with the arms or hands stem from the back, so if the back, neck, and head are not in alignment, motion isn't being used efficiently and health problems may arise. The elbows should be next to the body, not behind your body. Make sure the head is up and not staring down with the top of the head, as this again enforces another bad habit.



Grip

Like any lever, the primary element of grip is the fulcrum. The fulcrum is between the index finger at the first knuckle and the pad of the thumb. While this is the most important part of the grip it is often mistaken as the point that should have a lot of tension. **THIS IS NOT TRUE!** Yes there needs to be a certain amount of pressure to hold on to the mallet but the mallet should be able to move inside the cavity of your palm while playing.



It is easiest to determine too tight of a grip during a sustained roll; it is often one of the times where the mallets will move the most inside the hand. Remember the rubber pencil trick where the pencil was wiggled up and down to make it look as if it were made of rubber? Try doing it with the arm. That combination of wrist and fingers is similar to what the hand should look like while rolling. To complete the grip, simply wrap the other fingers loosely around shaft. This is another point in the process where many people grab on too tightly. This can create poor sound quality, hand speed fatigue, accuracy problems, and could also lead to physical problems such as tendonitis or carpal tunnel syndrome. Relaxation is key while playing.

Make sure the wrists are not fully extended to a 90° angle. This is especially a problem for tall people because many percussion instruments are too low. Adjust instruments when possible to correct height, which about 6" below the belly button.

Do not play with your wrists in this position.



Stroke

The easiest way to think of the wrist motion is 'Start up, End up.' Every single note's home base should be at an up position. While keeping the wrists relaxed and low to the instrument, the heads of the mallets should start up and off the instrument, fall down to strike the bar, and end up in the same position that they started in. Most of the motion is from the wrist, but there needs to be some give in the fingers to allow the mallet to come all the way up to full extension (vertical) and to alleviate any tension in the wrist. Since the bars won't produce much rebound, make sure that the lifting motion after bar contact is not forced. It should be relaxed natural looking, not sharp and angular.



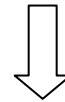
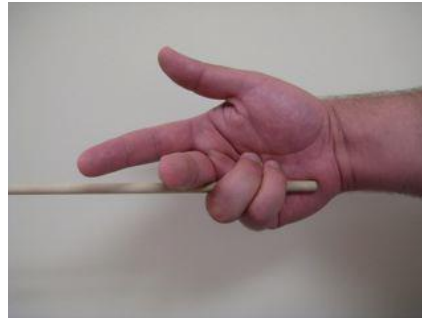
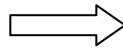
Make sure that there is some give in the grip of the mallet. The stroke should not be isolated wrist movement to the extent where nothing else moves. The tightness of the back fingers can have a tremendous amount of effect on the hand and stroke. Allow the mallets to move slightly inside the palm.

A common analogy is to “pull the sound out” of the keyboard. While this image can help, there still does need to be some amount of downward force to initiate movement. This initiation comes from the fulcrum. The fulcrum is what throws the mallet toward the bars. What is most important is what happens **after** the mallet makes contact with the bar. Start Up, Finish Up.

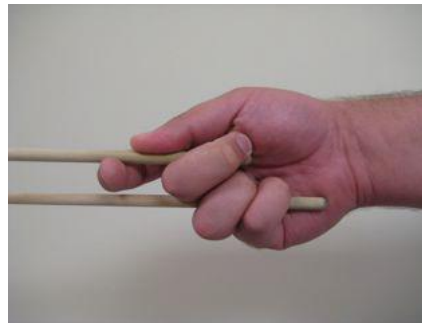
The same system of heights (3, 6, 9, and 12) is used for keyboard instruments. Proper attention must be paid to these heights especially since different keyboards are at different heights. Be consistent with where your instrument height is as well.

Stevens Grip (4-mallet)

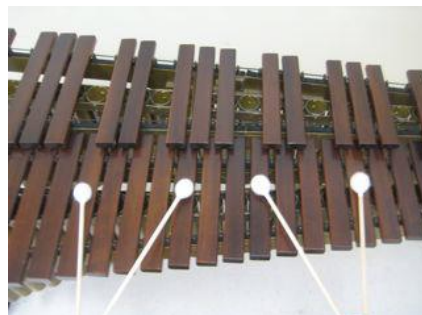
This is one grip for holding 4 mallets that is widely used today. It is a very versatile 4-mallet grip. Again, relaxation is paramount to the success of 4-mallet playing. First hold the hand out as if you were going to shake someone's hand. Put one mallet between your ring and middle fingers about a half-inch from the butt of the shaft and wrap those two fingers around the shaft. Don't pull with these fingers too tightly. Much of the pain and discomfort when playing with 4 mallets is from gripping too tightly with these two fingers. Again, the shaft should be able to move within this part of the grip and within these 2 fingers. Try doing the rubber pencil trick again holding the mallet in this position. Let the mallet shaft move. Don't restrict its movement.



To complete the grip, put the other mallet between the index finger at the first knuckle and the pad of the thumb. The middle finger will also wrap around the shaft slightly as well. Take out the other mallet and do the rubber pencil trick with only this mallet. Again, let the mallet move and learn how to control it.



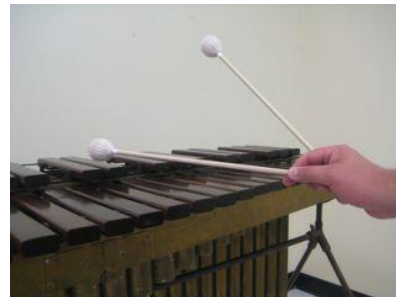
Each of the mallets has a corresponding number attached to them as a reference for stickings. From left to right, mallets are numbered 1-4.



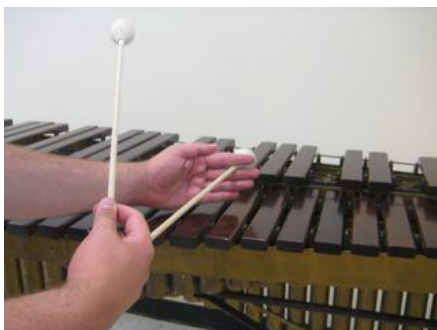
Stroke

Just as with two mallets, the concept of stroke is based on 'start up, end up.' Each mallet should return to this position after each stroke. Whether 2 or 4 mallets, each stroke should be straight up and down. This concept can change slightly when holding 4 mallets, however.

Certainly the guiding factor is every stroke motion being straight up and down. However, if we are playing with only one of the mallets at a time, a rotation takes place to allow one mallet to play while the others do not move. For example, playing with mallet 3 would mean the hand should rotate around mallet 4 to allow mallet 3 to move upward. This concept is the same for the opposite case where the outside mallet is playing and the rotation take place around the inside mallet.



One way to see what the stroke should look like in slow motion is to hold the shaft of the tacet mallet between your fingers allowing it to rotate as the other mallet moves up and down. For example, put the shaft of mallet 4 between your fingers and rotate mallet 3 upwards and downwards and vice versa.



A common tendency is to “pull your trigger finger.” This means that the index finger is pulled too far back on the mallet shaft. Especially when starting, this may seem like an easy fix, but by doing this, the grip and stroke are fundamentally changed. This will produce a poor stroke motion and poor sound quality.



Another common tendency is to inch the thumb up on its tip for the same reason: stability. Be sure to keep the proper fulcrum at all times. Comfort with the technique, grip, and stroke will come with time. Do not sacrifice technique for a quick and easy fix. These tendencies will cause more problems down the road.



DON'T DO THESE!!

4-Mallet Stroke Types


These 4 different stroke types dictate different sticking patterns, which in turn, dictate that the wrist move in different ways to accommodate these stickings. These stroke types are what make up 4-mallet literature and should be practiced independently from the music that is to be performed. The two lines of numbers represent two possible sticking options for the corresponding music.

Single Independent strokes are when only one mallet in a hand plays a note. This would be where the rotation concept comes into play that was discussed earlier.



A musical staff showing four quarter notes in ascending order. Below the staff, two lines of numbers indicate sticking options: the first line has '3 3 3 3' and the second line has '1 1 1 1'.

Double Lateral strokes are when one mallet in a hand plays directly after the other mallet in that same hand. This motion can be either an inward (1-2 or 4-3) motion or an outward (2-1 or 3-4) motion.



Two musical staves. The first staff shows two quarter notes with a slur over them, with numbers 4 and 3 below. The second staff shows two quarter notes with a slur over them, with numbers 3 and 4 below.

Double Vertical strokes (also sometimes referred to double-stops) are 2 or more mallets play at the same time. This would be used for block chords. The wrist is used primarily in this stroke, as compared to rotation of the wrist for the other strokes.



Two musical staves. The first staff shows a block chord of four notes with a horizontal bar above them. The second staff shows a block chord of four notes with a horizontal bar above them and a sharp sign below the staff.

Triple Lateral (multiple lateral) strokes start the same as doublelaterals, but they add more notes in the same hand. In this case, it means 3 alternating notes in the same hand.



Three musical staves. The first staff shows three quarter notes with a slur over them, with numbers 1 2 1 below. The second staff shows three quarter notes with a slur over them, with numbers 4 3 4 below. The third staff shows three quarter notes with a slur over them, with numbers 4 3 4 and 2 1 2 below.