
Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, technical proofs (TP), and all past articles are available online at billiards.colostate.edu. Reference numbers used in the articles help you locate the resources on the website.

I recently posted a new online video ([NV J.33](#)) that demonstrates my Top 10 Tips for improving your draw shot technique. As I am sure most of you know, a draw shot is where you hit low on the cue ball (CB) to impart bottom-spin to make the CB come back after hitting the object ball (OB). Many beginners, and even some intermediate players, struggle with this important but sometimes-elusive skill. Below is a summary of the ten tips of advice from the video.

1. Chalk Up

The first important piece of advice is to chalk the tip properly. As demonstrated in the video, do not just carelessly use your bridge hand to chalk. And do not drill a hole into the chalk. And do not rotate the chalk around the tip. This dirties and damages the ferrule. These technique waste chalk, get chalk dust everywhere, and get your bridge hand dirty. Instead, as demonstrated in the video and in **Photo 1**, hold the cue at an angle so the tip is lower. Carefully apply chalk to the edges of the tip where it is needed, using a swiping motion as you rotate the cue. And check the tip visually during and after chalking to make sure the tip surface is covered completely.



Photo 1 How to Chalk Properly

2. Aim Low and Carefully

To get good draw, you must hit low on the CB. As shown in **Photo 2**, a standard striped ball can be used to visualize how low you can go without miscuing. The tip contact point can be as low as the edge of the stripe. Look how much you can lower the tip to apply backspin. The width of a standard ball stripe is half the ball's diameter, which corresponds to the size of the miscue limit circle. A good way to test if the stripe width is the standard size is to freeze 3 balls in a triangle, as shown in **Photo 3**. If the stripe width is half the ball

diameter, the stripe edges will align. Balls with large numbers in the stripe will usually have a stripe width wider than the standard size, so be aware of this.



Photo 2 Using a "stripe" to visualize how low you can hit

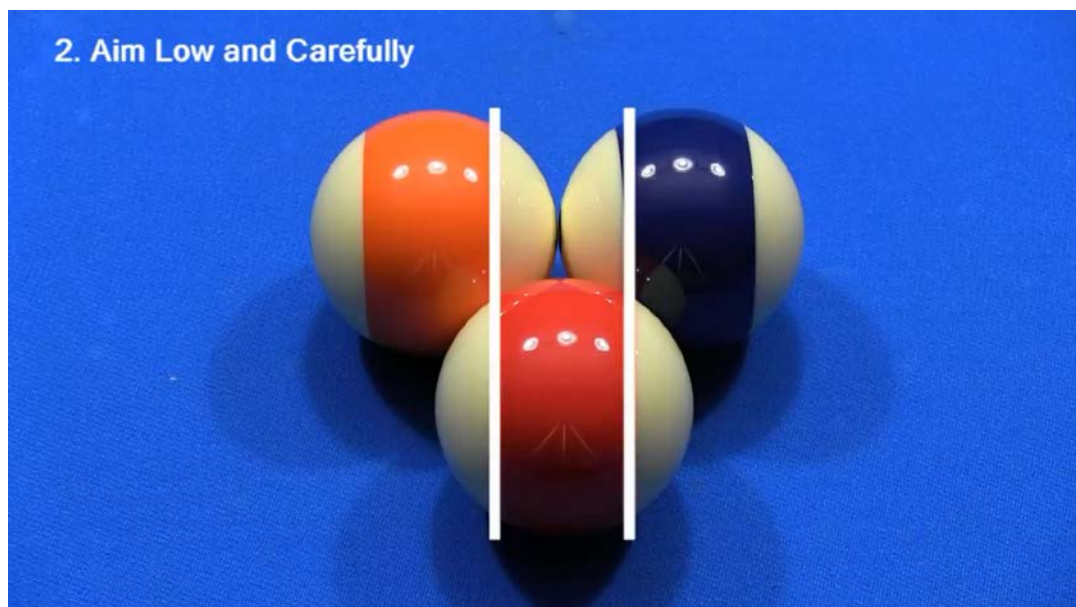


Photo 3 Checking for standard-width stripe

3. Warm-Up and Check

It is very important to carefully check both the tip position and aim with the cue still and with the tip close to the CB in your set position. Also return the tip close to the CB after each of your warm-up strokes so you can easily verify accurate placement. It is also good practice to verify the tip contact point and aim again, with the cue still, before your final stroke.

It helps to have a deliberate and consistent eye pattern during your pre-shot routine. As demonstrated in the video, focus on the OB target as you bring your cue down into place. Check both the aim and tip contact point with the cue still by slowly moving the eyes back and forth. Focus on the CB during the warm-up strokes to make sure you do not hit the CB by mistake and to ensure the cue remains straight with the desired tip contact point. Then again hold the cue still to re-verify the aim and tip contact point. Then lock your eyes with laser focus on the OB target before the final stroke delivery. You do not need to do everything exactly like these “best practices” recommendations; but regardless of what you do, be deliberate, careful, focused, and consistent.

4. Keep Cue Level

Make sure you do not elevate the back of the cue more than you need to. As shown in **Photo 4**, if you lower and collapse your bridge hand and lengthen your bridge distance, it is much easier to get the cue more level. You can get good draw with an elevated cue, assuming the CB doesn't hop too much; but with the cue more level, your draw shots will be more accurate and more effective. Despite what old-school books, players, and instructors might say, an open bridge has many advantages over a closed bridge. And this applies to draw shots too. For more information, see the “[open vs. closed bridge](#)” resource page under “bridge” in the FAQ section at billiards.colostate.edu.



Photo 4 Using a longer bridge length and flatter bridge hand to get cue more level

5. Go Back Slow

Be very careful to not rush your stroke. It does not help to pull the cue back fast. In fact, it can only hurt by causing unwanted body motion that can push the cue off-line. Instead, pull the cue back slowly on your final backstroke, and do not rush the transition between the back and forward strokes. For some people, it helps to add a distinct and deliberate pause. If you do not pause, just be sure to be smooth with the back-to-forward transition. If you have trouble with jerking and rushing the transition, it can be helpful to add a deliberate pause. If you pause, there is no way you can jerk the transition.

6. Accelerate Smoothly

If your bridge length is short, not only is it difficult to get the tip low without elevating the back of the cue, you also need to punch the stroke to get more speed. If you use a longer bridge length, you will have more distance to accelerate smoothly to generate more speed. This will help make your stroke more accurate and consistent.

It is very important to not decelerate into the CB. This will reduce your draw effectiveness, and it will wreak havoc on your speed control. People tend to decelerate into the CB when they are not fully committed to or confident with the shot. Remember, go back slow, and accelerate smoothly into the CB.

When you do not need as much draw distance, you can use a shorter stroke with the same low tip position. If you have trouble using a shorter stroke with the same long bridge length, an option is to shorten the bridge length to force the shorter stroke. One disadvantage of this approach is the back of the cue will need to be elevated more to get the same low tip position. Another way to control draw amount is to vary the tip height. Obviously, with a higher tip, you get less draw. Generally, a lower tip and slower speed will offer more control, except with a controlled stun-back shot.

7. Keep Your Grip Relaxed

It is very important to keep your grip relaxed during the entire stroke. If you tighten your grip during the shot, the tip will hit the CB lower than you think. You also want to be careful to keep your wrist relaxed. If you flex your wrist during the stroke, the cue will not stay on-line. You also do not want to have too much of a gap or slop in your grip. If you tighten a sloppy grip by mistake, the cue really moves a lot. You also do not want the grip tension. With an overly tight grip, you will not be able to have a relaxed and smoothly-accelerating stroke.

Even worse than tightening just your grip during the stroke is tightening your entire arm. If you do this, the entire cue will lift during the stroke. If this happens during a draw shot with an open bridge, you will not get much if any draw on the ball since the tip will hit the CB higher than expected. For somebody who has trouble with this, a closed bridge can help counteract the stroke deficiency.

As demonstrated in the video, when your grip is relaxed the cue should easily pivot in the grip hand during the stroke. If your grip is too tight, the wrist will pivot back and forth, and it will be very difficult to stroke smoothly, accurately, and consistently.

8. Be Still

Another important tip, especially for draw shots, is to keep your head and body as still as possible during and after the stroke. Do not lift up and turn your head to watch the OB. And do not lift your body up on the shot either. Be a "relaxed statue" during and after the shot. If you do not lift your head or body after the shot, there is no way you will do it by accident during the shot.

9. Do Not Drop Your Elbow

Another key to cue-tip contact-point accuracy, especially with a draw shot, is to keep the elbow still during the stroke into the ball. As demonstrated in the video, if you want to practice this you can have a friend lightly place fingers around your elbow while you stroke back and forth. If you drop your elbow, it will be clear to both you and your friend. Your friend can also hold your upper arm and shoulder while you stroke to remind you that these should be still to keep the elbow from dropping. Another clue of a dropping elbow is banging the cue into the rail. Again, keep your elbow still during the stroke into the ball to be accurate with the tip contact point. If you drop your elbow, you will not hit the CB where you expect, and you will not get as much or any draw.

It is OK to drop the elbow if you can drop it straight, and if you drop it mostly after the hit. However, one problem with elbow drop for some people is that other bad things sometimes come with it, like wrist flex. Or they also “chicken wing” the elbow out as the elbow goes down.

Another important thing about the elbow is that it should be straight up, with the forearm perpendicular to the cue. You should not have the elbow “chicken winged” out, and you should not have it tucked in before the stroke. When the forearm is not in a vertical plane, the cue will usually not move in a straight line during the stroke.

10. Finish the Stroke

The final important attribute of a good draw shot is finishing the stroke and resisting the urge to pull back prematurely. If you have trouble with this, you should practice staying down and still after the shot until the CB comes back to the tip with a straight shot. You have plenty of time to get out of the way. One approach is to just roll the cue sideways when necessary. Another approach is to just gradually move back when the CB starts getting close.

If you finish a draw stroke properly, the tip should finish down on the table; and with an open bridge, the cue will often finish up above the bridge support. There is nothing wrong with cue lift since it doesn't occur until the CB is long gone. You do not need to force the follow through. If you accelerate into the ball and stay relaxed, the follow through will happen naturally. Again, do not rush to get the cue out of the way. There is plenty of time to finish the stroke first. Do not jerk the cue back.

I hope the information in this article helps you improve your draw shot technique and effectiveness. Everything described is demonstrated in online video [NV J.33](#). Most of the advice in this video applies to all types of shots ... not just draw shots. Draw shots just require a lower tip position and usually more cue speed. They are also much less forgiving and demand more accuracy than other type of shots. Be sure to watch the video and practice the drills demonstrated and recommended. Only then can you really put the information to use effectively.

Good luck with your game,
Dr. Dave



[NV J.33](#) – Top 10 Secrets of a Good Draw/Backspin/Screw-Back Shot

PS:

- I know other authors and I tend to use lots of terminology, and I know not all readers are totally familiar with these terms. If you ever come across a word or phrase you do not fully understand, please refer to the [online glossary](#) at [billiards.colostate.edu](#).

Dr. Dave is a PBIA Advanced Instructor, Dean of the Billiard University, and author of the book: [The Illustrated Principles of Pool and Billiards](#) and numerous instructional DVD series, all available at: [DrDaveBilliards.com](#).