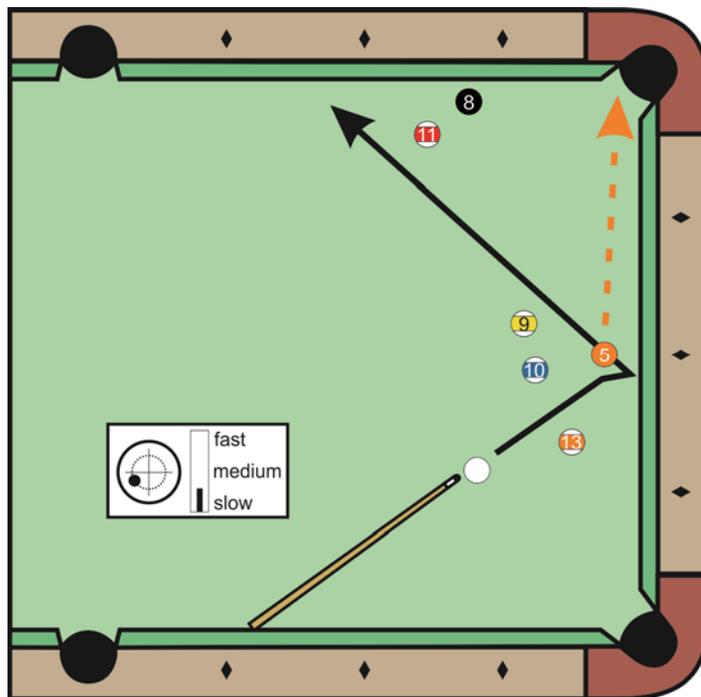


Supporting narrated video (NV) demonstrations, high-speed video (HSV) clips, technical proofs (TP), and all of my past articles can be accessed and viewed online at [billiards.colostate.edu](http://billiards.colostate.edu). The reference numbers used in the articles help you locate the resources on the website. If you have a slow or inconvenient Internet connection, you might want to view the resources on a DVD. Details can be found online at: [dr-dave-billiards.com](http://dr-dave-billiards.com).

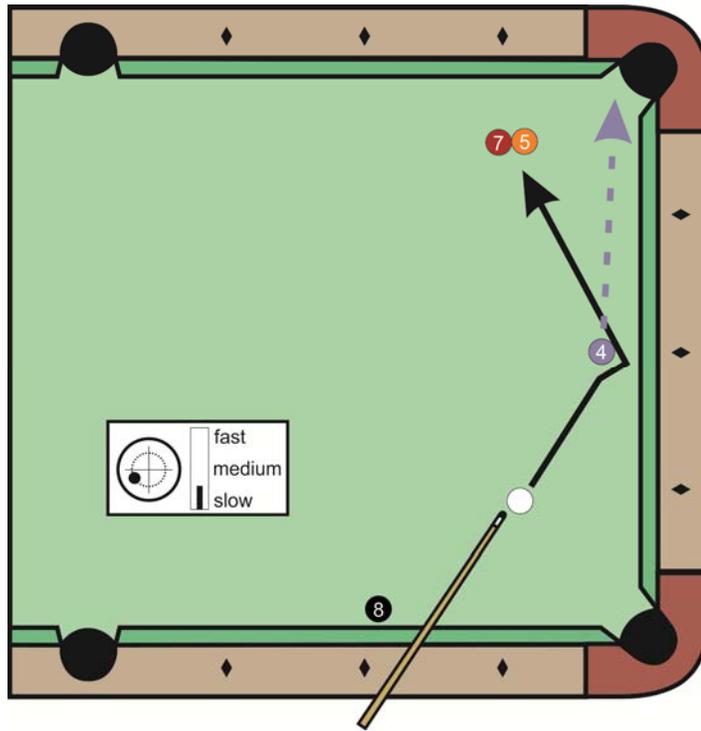
This is the third article in a series dealing with the “[Video Encyclopedia of Eight Ball \(VEEB\)](#),” a five-disc instructional-DVD set I recently created with fellow *Billiards Digest* columnist Bob Jewett. VEEB teaches all of the skills, knowledge and strategy one needs to excel at 8-ball. Topics include offensive and defensive strategy, position play, shot types, safety play, advanced shots, and run-out planning. An outline of the entire VEEB series along with video excerpts from each DVD can be viewed online at: [dr-dave-billiards.com/8-ball](http://dr-dave-billiards.com/8-ball).

As shown in **Diagram 1**, sometimes we need to create a very larger rebound-angle change off a cushion to achieve position. Here, we need to lengthen the angle as much as possible to go forward past all of the obstacle stripes to the 8. To get the maximum effect of sidespin, it helps to use cue ball (CB) drag by hitting below center of the CB, with sidespin. The CB starts off sliding some, and this sliding slows the CB. This is called drag. During drag, the CB develops forward roll and doesn't lose much sidespin in the process. Because the CB's forward speed has slowed, but the spin hasn't changed much, the angle off the cushion will go longer than it would be otherwise.



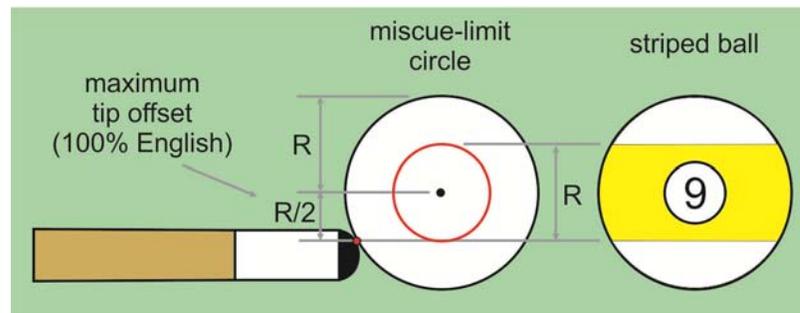
**Diagram 1** Using drag spin for position past obstacles

**Diagram 2** shows another example where we need to pocket the 4 and have the CB rebound long enough to break out the 5-7 cluster. To an inexperienced eye, it might seem difficult or impossible to get an angle this shallow off the rail; but with a drag shot, the intensified sidespin can easily accomplish the break out. Remember, start the CB sliding and use CB drag to intensify the effects of sidespin.



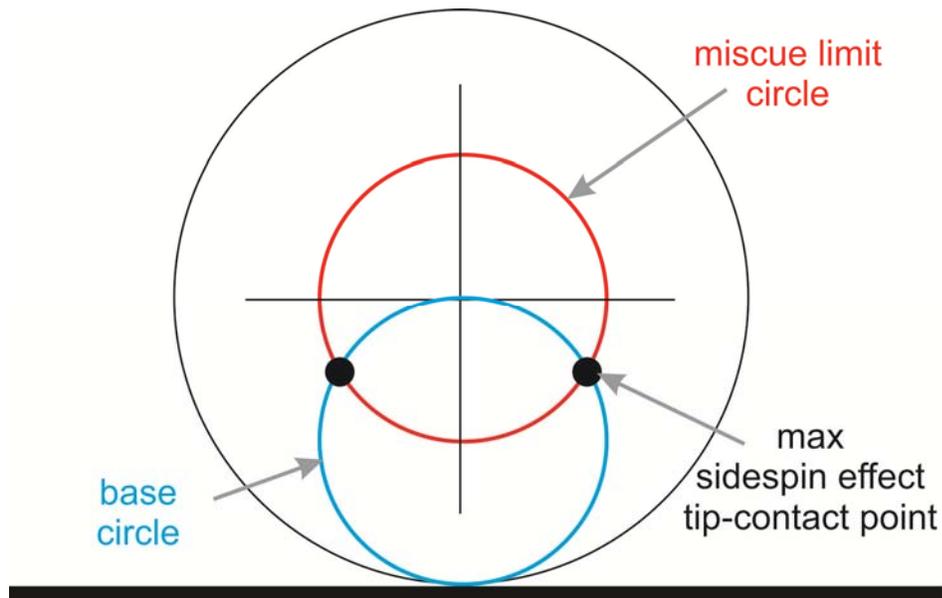
**Diagram 2** Using drag spin for a break-out shot

Generally, to get more spin on the CB, you hit farther from center. It also helps to have a good tip that is shaped and chalked properly. **Diagram 3** illustrates the miscue limit, the farthest your can hit from CB center without having the tip slip off the CB. With typical equipment, the miscue limit is at half of the ball's radius from center. A striped ball can be useful to practice miscue-limit visualization because the width of the stripe on a standard ball is half the ball's diameter, so the edges of the stripe border the typical miscue limit.



**Diagram 3** Miscue limit visualization

As mentioned above, to achieve the most effect from sidespin, you want to use a drag shot. Online video [NV B.10](#) illustrates how sidespin persists as the CB's backspin converts to stun and then forward roll due to drag. The ideal tip contact point to get the largest effective sidespin is illustrated in **Diagram 4**. It is at the intersection of the miscue-limit circle (red) and the base circle (blue) of equal size going through the center and resting point of the CB. The tip isn't as far from the vertical centerline of the CB as it would be at the miscue limit on the horizontal centerline (equator) of the CB, so the initial spin won't be maximum; but the drag action created by the bottom spin increases the effective amount of sidespin due to the drag slowing. This tip contact point results in the largest effective sidespin only after all backspin has worn off and the CB has developed full roll. At that point the CB will have more effective sidespin than is possible with any other hit. For those interested, a math and physics based proof can be found in [TP B.17](#).



**Diagram 4 Ideal tip contact points for maximum spin effect**

Demonstrations of the shots in this article can be viewed in online video [NV G.4](#), and the VEEB-II DVD includes many more game-situation examples dealing with position play, combination shots, carom shots, kiss shots, cluster shots, kick and bank shots, and throw shots. As always, you should check out the videos and try the shots yourself the next time you are at a table. Reading is good, and watching is better, but trying is best.

I hope you enjoy my series of articles dealing with the “Video Encyclopedia of Eight Ball (VEEB).” If you want to view video excerpts from the entire DVD set, check out online videos [NV G.1](#) through [NV G.11](#). Enjoy!

Good luck with your game,  
Dr. Dave

[NV B.10](#) – Drag Spin Loss and Sidespin Persistence

[NV G.1](#) – Video Encyclopedia of Eight Ball (VEEB) Overview

[NV G.2](#) – How to Deal With Pocket Blockers in 8-ball, from Disc I of VEEB

[NV G.3](#) – How to Select Key Balls in 8-ball, from Disc I of VEEB

[NV G.4](#) – How to Use Cue Ball Drag to Enhance Sidespin in 8-ball, from Disc II of VEEB

[NV G.5](#) – How to Use Spin-Induced Throw to Hold the Cue Ball in 8-ball, from Disc II of VEEB

[NV G.6](#) – How to Come Into the Line of Blockers When Playing Safeties, from Disc III of VEEB

[NV G.7](#) – Various Straight-In Shot Options in 8-ball, from Disc III of VEEB

[NV G.8](#) – How to Deal with an End-Game Ball Tied Up with the 8-ball, from Disc IV of VEEB

[NV G.9](#) – 2nd-Ball 8-ball Break, from Disc IV of VEEB

[NV G.10](#) – Rack 8 Run-Out Example from Disc V of VEEB

[NV G.11](#) – Rack 9 Run-Out Example from Disc V of VEEB



normal video



technical proof

[TP B.17](#) – Maximum Drag-Enhanced Sidespin Tip Contact Point

**PS:**

- I am happy to announce that my entire collection of instructional DVDs (23 total to date) is now available for streaming via YouTube. For more info, see: [dr-dave-billiards.com/stream.html](http://dr-dave-billiards.com/stream.html).

- 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 don't fully understand, please refer to the [online glossary](#) at [billiards.colostate.edu](http://billiards.colostate.edu).

*Dr. Dave is author of "[The Illustrated Principles of Pool and Billiards](#)" book and DVD, and co-author of the Video Encyclopedias of "[Pool Shots \(VEPS\)](#)," "[Pool Practice \(VEPP\)](#)," and "[Eight Ball \(VEEB\)](#)," and the "[How to Aim Pool Shots \(HAPS\)](#)," and "[Billiard University \(BU\)](#)" instructional DVD series.*