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

This is my seventeenth and final article in a series based on the “[The Video Encyclopedia of Pool Shots \(VEPS\)](#),” an instructional 5-DVD set I recently created with past BD columnist and good friend Tom Ross. VEPS contains 750 shot types and principles within 50 main categories and 5 major areas. An outline of the entire VEPS series and video excerpts from each DVD can be viewed online at: dr-dave-billiards.com/veps. This article features proposition and trick shots from the last DVD: “[VEPS V – Skill and Specialty Shots](#).”

Diagram 1 shows the setup for a classic proposition shot involving cut-induced throw (CIT). All three object balls are frozen to each other, and the 5-ball and 11-ball are frozen to the cushion. With typical conditions, hitting the 4-ball into the 11-ball throws the 5-ball into the cushion causing it go wide of the pocket as shown by the “typical” path in the diagram. **NV B.91** demonstrates how this fact can be used to your advantage as a proposition or joke to play against a gullible or unknowledgeable bystander (AKA “mark”). Here’s how it’s done: First, being careful to not let the “mark” notice, use a finger to apply some saliva at the contact point between the 11-ball and 5-ball. Then demonstrate just how easy the shot is. With the secret spit at the contact point, there will be almost no friction between the balls during the hit, and the 5-ball will head virtually straight down the rail with little or no throw (see the “w/ spit” path in the diagram). Then, challenge the “mark” to make the shot. Of course, it won’t be exactly the same shot, but that’s between you and me. When you set up the shot for the “mark,” apply a chalk smudge at the contact point. This creates cling (excessive friction) between the balls during the hit, and the 5-ball will be thrown much more than normal into the cushion, rebounding well wide of the pocket (see the “w/ chalk” path in the diagram). You may want to view NV B.91 to see how Tom is able to prepare and switch the balls without the “mark” (me) noticing the subterfuge. While we were filming, the proposition didn’t go exactly as we had planned, but Tom and I managed to improvise and pull it off anyway. The key to pulling off the proposition is to make sure the contact point is wet for the “set up” shot. It can also help to use more speed because there is less CIT at faster speed, but be aware that faster speed can also cause the ball to rattle out of the pocket.

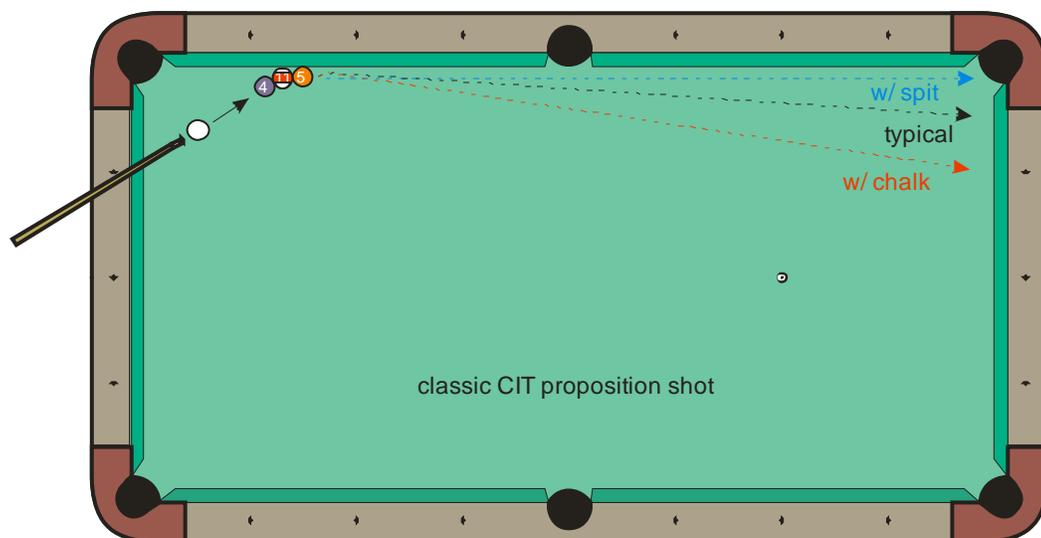


Diagram 1 Classic CIT proposition shot

In addition to including a variety of proposition shots, [VEPS V](#) also features the “Top Ten Most Famous Trick Shots of All Time,” as selected by me and Tom:

1. “machine gun” shot
2. “parting the Red Sea” shot
3. “jump ball out of the rack” shot
4. “butterfly” shot
5. “line of four balls” shot
6. “passing lane” shot
7. “over and under the bridge” shot
8. “Pool Hall Junkies” carom-kick timing shot
9. “The Hustler” billiard masse
10. “The Hustler” frozen bank

Shots “4” and “5” are demonstrated in **NV B.93**, and we’ll look at these in detail. All of the others are described and demonstrated on VEPS V. As with the proposition shot above, CIT is an important factor in these “trick” shots.

Diagram 2 illustrates the classic “butterfly shot.” The goal is to pocket all six balls in each of the six pockets. To set up the shot, first place a spare ball at the ghost-ball position shown in the diagram, along the centerline of the table, one diamond above the side pockets. Then freeze the 1-ball and 4-ball to this ball along lines directly to the side pockets. Firmly set these balls in place by tapping down with another ball. Then freeze the other four balls so the lines-of-centers point to the short-rail sides of the target pockets. The exact angles required depend on the conditions of the balls (i.e., the amount they throw). The 3-ball and 6-ball will need to be aimed farther from the pockets because they are thrown over a larger distance. When the CB is sent into the cluster, the 1-ball and 4-ball throw the other balls into the corners and then travel down the tangent lines off the 2-ball and 5-ball into the side pockets. If the balls are set up well, this shot is actually difficult to miss, even if you don’t split the 1-ball and 4-ball with much accuracy.

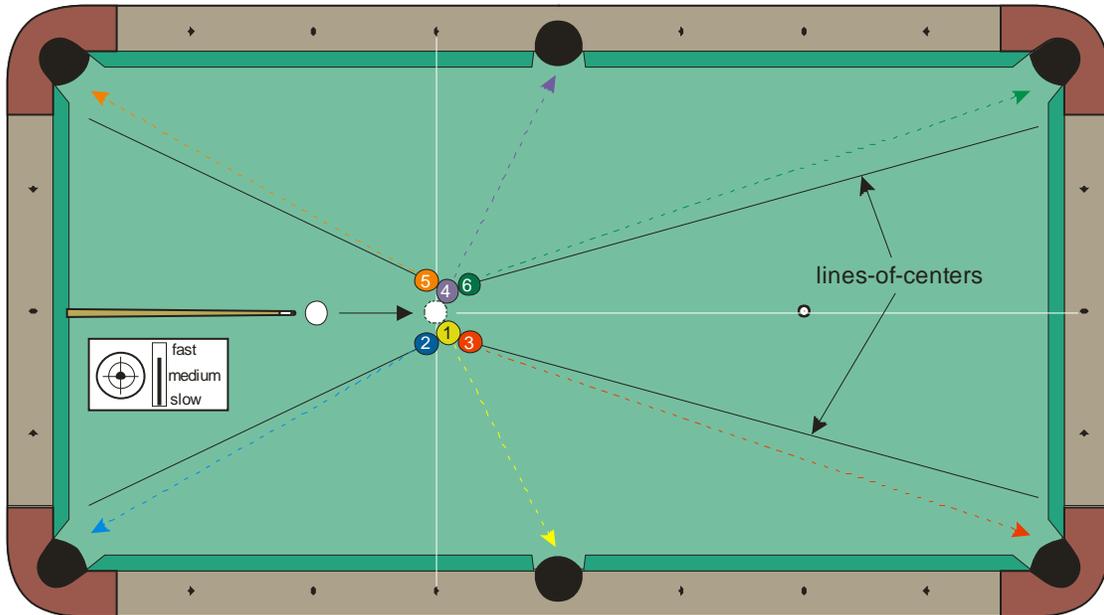


Diagram 2 Butterfly trick shot

Diagram 3 illustrates the classic "line of four balls" trick shot. This shot is also fairly easy to execute if set up properly. First, all four balls must be frozen, and the line through their centers should be slightly up table of the side pocket to compensate for throw of the 4-ball. The cue ball (CB) is aligned between the 3-ball and 4-ball, one diamond up table, although the exact placement isn't critical. Use a draw shot, aiming to hit the 3-ball just before the 2-ball. The 3-ball throws the 4-ball into the center of the opposite side pocket. The 3-ball picks up clockwise spin from the CB cut angle, and this spin is reinforced by the cut on the 4-ball. The 3-ball heads down table along the tangent line off the 4-ball, and the transferred spin changes the rebound angle off the end rail for a straight-back bank into the corner pocket. The cut angle and bottom spin help clear the CB out of the way of the banking 3-ball. After hitting the 3-ball, the bottom spin on the CB also transfers a small amount of topspin to the 2-ball that helps push it forward of the tangent line. In addition, because the 2-ball is frozen to the 1-ball and hit at an angle, it will naturally head forward of the tangent line slightly (for more info, see **NV B.56**). Finally, the hit on the 2-ball sends the 1-ball into the side pocket. The ball most likely to give you trouble is the 3-ball. The amount of transferred spin depends on ball conditions and shot speed. If the 3-ball goes long of the corner (i.e., if it hits the long rail first) use more speed to reduce the amount of spin transfer. If it comes up short (i.e., if it hits the short rail first), use less speed to create more spin transfer; although, more sidespin will wear off on the way to the end rail at slower speed. You also need enough speed to have the 4-ball reach the opposite side pocket. You can also vary the CB position and the amount of draw to alter the action of the shot if necessary.

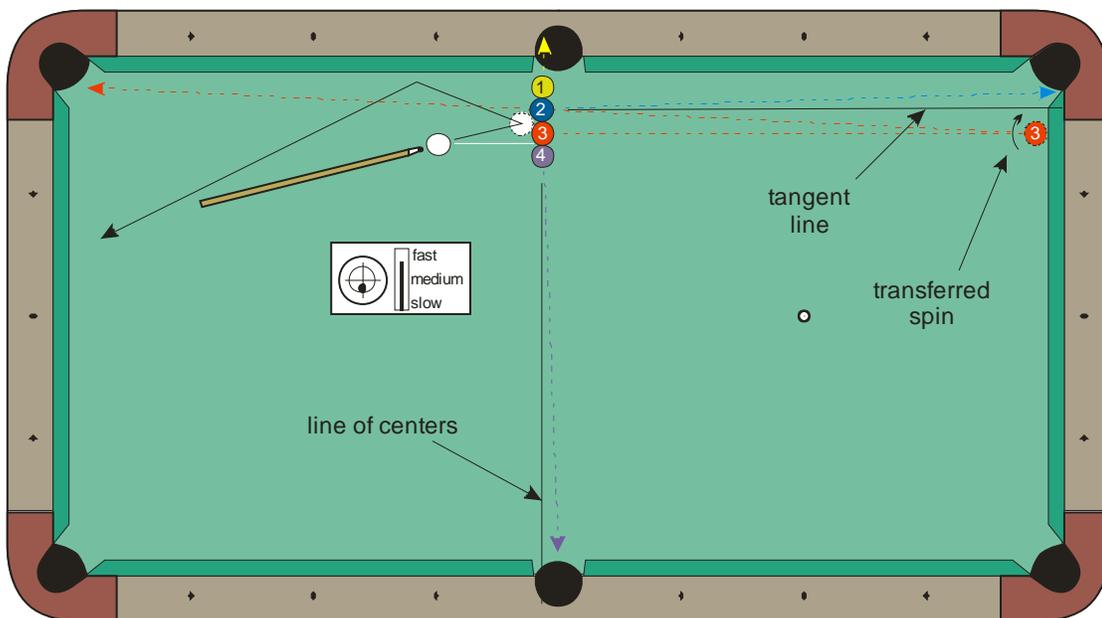


Diagram 3 Line-of-four-balls trick shot

I hope you have enjoyed and benefited from my series of articles featuring shots and gems from the “[Video Encyclopedia of Pool Shots \(VEPS\)](#).” Example shots from the fifth VEPS DVD can be viewed on the [VEPS website](#) or at [billiards.colostate.edu](#) under **NV B.87** through **NV B.93**.



normal video

- [NV B.56](#) - Bob Jewett's ten-times-fuller frozen-object-ball aiming system
- [NV B.87](#) - Jump shot technique, from VEPS V
- [NV B.88](#) - Massé shot technique, from VEPS V
- [NV B.89](#) - 9-ball racking strategy, from VEPS V
- [NV B.90](#) - 8-ball and 9-ball run-out examples, from VEPS V
- [NV B.91](#) - Frozen-throw-down-rail proposition shot, from VEPS V
- [NV B.92](#) - "Impossible" cut shots, from VEPS V
- [NV B.93](#) - Famous trick (artistic pool) shots, from VEPS V

Good luck with your game,
Dr. Dave

PS:

- I know other authors and I tend to use lots of terminology (e.g., squirt, throw, stun, ball-hit fraction, etc.), 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](#) on my website.
- I want to thank Jim Valasina. He graciously proof-reads my articles every month to help find errors and make suggestions. My article quality is better as a result of his efforts. Thanks again Jim!

Dr. Dave is author of the book, DVD, and CD-ROM: “[The Illustrated Principles of Pool and Billiards](#),” the DVD Series: “[The Video Encyclopedia of Pool Shots](#),” and the DVD: “[High-speed Video Magic](#).”