"How to Break in 3-Ball" Dr. Dave Alciatore, PhD

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

Have you ever played 3-ball? If you have been around pool awhile, I am sure you have. And you have probably won or lost lots of \$1 bills in the process. The goal of 3-ball is to pocket three balls with as few shots as possible, including the break. Let's look at different strategies for the all-important break shot, all of which are demonstrated in online video <u>NV J.4</u>.

One approach is to just hit the break hard from the side or center and hope something goes. Obviously, this is not a very good approach. The probability to make a ball is low, and you don't always get an easy shot after the break. Sometimes you will make a ball and get good shape for an easy run; but more often than not, no balls will go and you won't know where things will end up. If you don't make a ball on the break, the best score you can get is a 4, assuming you don't scratch on the break, have a shot after the break, and don't miss any shots. Another option, shown in **Diagram 1**, is to use a soft break and play for a post-break shot at the 1. You're unlikely to make a ball this way, but you give yourself a good chance to a run out for a score of 4.

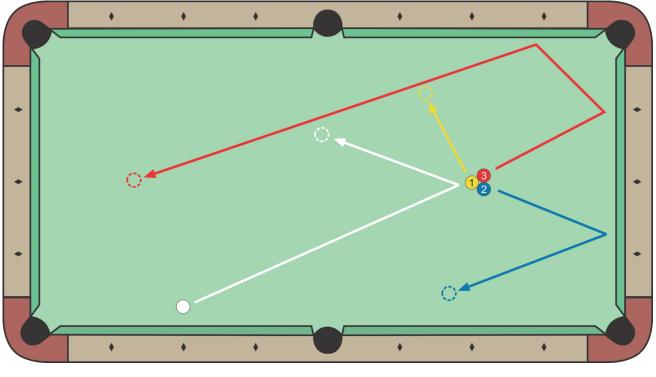


Diagram 1 Soft break

Another approach, as shown by the solid ball paths in **Diagram 2**, is to use power, breaking from the side, focusing on pocketing the 3 off 4 rails. If you back-cut the 1, the 3 usually goes long; and if you hit the 1 squarely, the 3 usually goes short. If you use just the right amount of slight back cut, you can make the 3. However, as shown in online video <u>NV J.4</u>, the 2 can sometimes get in the way. Sometimes you can get better results breaking from the other side of the table, which is always a good thing to check with all of the approaches. Regardless, the 3-ball direction is very sensitive to the angle of the hit, so this approach is also nonideal.

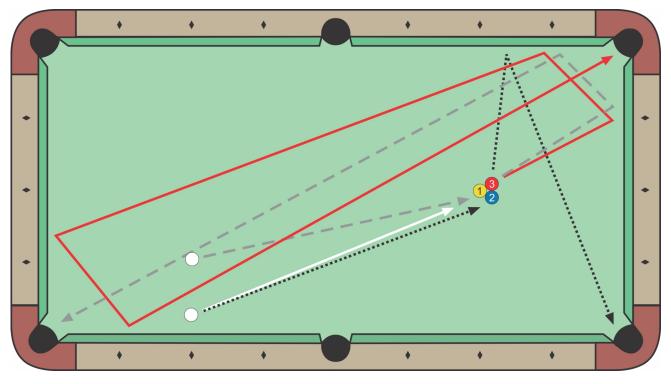


Diagram 2 Banks

Another approach, shown with the dotted ball paths in **Diagram 2**, is to hit the 2 first, attempting to bank the 3 cross corner. It doesn't go on my table because I can't get quite enough throw and spin-transfer from the 2 to the 3 to get enough angle. However, on a table with old and dirty balls, or with cushions that bank long, this might be a very easy and reliable approach. I can make it work on my table by adding chalk to the contact point between the 2 and 3, creating more friction to increase the amount of throw and spin transfer, but that's cheating. An advantage of the soft-bank approach, if it works on your table, is the balls stay close, usually resulting in a fairly easy run out for a score of 3. As demonstrated in online video <u>NV J.4</u>, an option on my table is to use more speed, attempting to bank the 3 twice across. A benefit of the extra speed is the 2 also has a chance to bank to the upper-left corner. However, this approach is low percentage since the twice-across bank requires a near-perfect hit.

Another option, shown with the dashed ball paths in **Diagram 2**, is to hit the 1 at a slight angle to send the 3 off two rails to the opposite corner. And with the right speed, you can also leave an easy shot at the 1 or 2 for an easy score of 3. This approach might seem good, but it is tough to get the hit just right to pocket the 3.

Diagram 3 shows my favorite 3-ball break strategy, using soft speed with inside english, just barely clipping the 1 ball. With a good hit, the 3 goes into the corner and the 1 and 2 come to rest in the middle of the table, usually for an easy runout. Also, the inside english kills and straightens the cue ball's motion to get a good shot after the break. With the leave in the diagram, you can use a combination to both pocket the 2 and follow the 1 into the side for a score of 2, which is awesome. Sometimes, you can pocket both the 2 and 3 on the break for an easy score of 2, but this is difficult to do consistently. Online video <u>NV J.4</u> demonstrates several ways to get a score of 2 using these approaches. And even if you don't pocket the 3 or the 2, you usually still get a very good chance for an easy score of 4. And even if you entirely miss the 1, you still usually get a decent chance for a score of 4. So this break approach has very little down-side risk. You almost always have a good shot at a score of 4; and with a good hit, a 3 is very easy, and even a 2 is possible. You can't ask for much better than this.

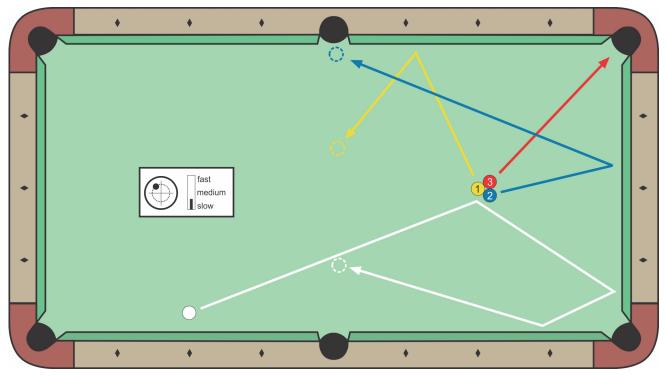


Diagram 3 Thin with inside

Actually, you can ask for better than a 4, 3, or 2. You can ask to pocket all three balls on the break for a score of 1! There is an approach to do this, but it is very aggressive with down-side risks, and it is low-percentage. As shown in **Diagram 4**, you need to break from the side and thin the 1 with fast speed and a center ball hit. With just the right hit and conditions, you can make the 3 in the corner, the 1 in the side, and the 2 in the upper corner. Online video <u>NV J.4</u> demonstrates several good attempts on my table. As with the earlier soft-speed approach, the key is thinning the 1 the exact amount necessary to send the 3 to the corner. I wasn't able to pocket all three balls on my 9' Olhaussen; but on a table that banks short, like most Diamond tables, you have a better chance of succeeding for a score of 1!

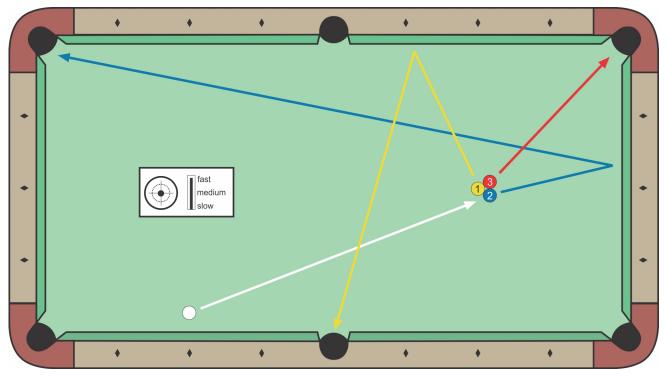


Diagram 4 Fast thin hit

I hope you enjoyed learning about all of the different 3-ball break strategy options. The next time somebody challenges you to a friendly 3-ball gambling match or proposition, you should now be better prepared to teach them a lesson with some low scores.

Good luck with your game, Dr. Dave



NV J.4 – 3-Ball Pool Break Strategy and Tips - How to Make a Ball and Score Low

<u>PS</u>:

• 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 <u>online glossary</u> at <u>*billiards.colostate.edu*</u>.

Dr. Dave is a PBIA Advanced Instructor, Dean of the Billiard University, and author of the book: <u>*The Illustrated Principles of Pool and Billiards*</u> *and numerous instructional DVD series, all available at:* <u>*DrDaveBilliards.com*</u>.