

Gary Dickinson: Senior Bowler of the Year ■ Interview: Kim Couture

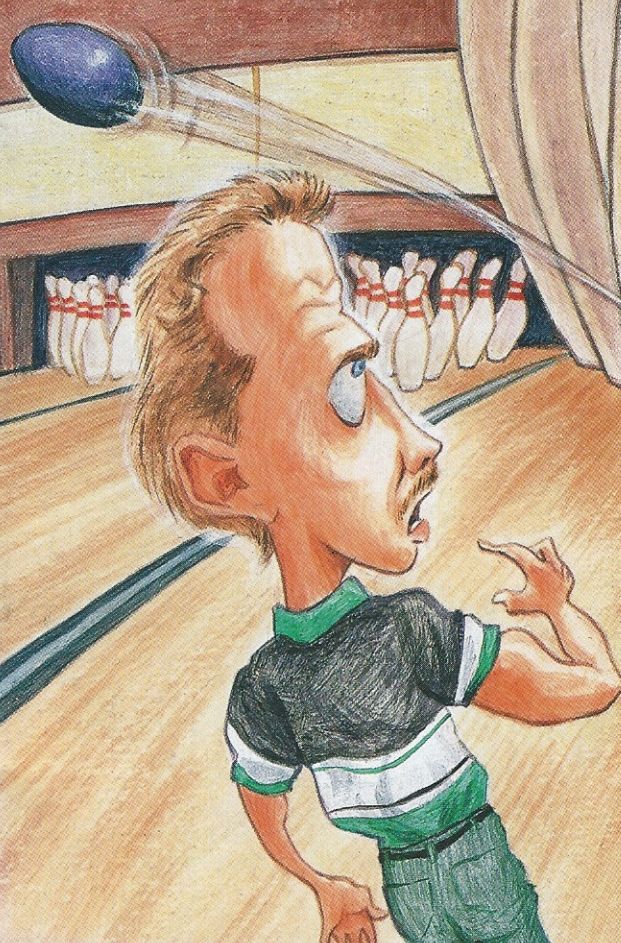
# BOWLING

## DIGEST

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### When the Pins Stop Falling

*Everybody goes through slumps—here's how the top pros break out of them*



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# Bill Spigner's Bowling Clinic

**I'm a member of the PBA, a right-handed bowler with a 200 average, so I feel embarrassed asking this question because I should already know the answer. However, it's been hard for me to get any information. I would like to know the difference between pin-in and pin-out; pin placements from 12 to 6 o'clock; and what conditions are they good for?**

You don't need to be embarrassed—you're not alone in having difficulty understanding pin placement. There are touring pros who don't fully understand pin placements and what they do. They rely on the tour ball drillers to assist them in getting the pin and balance right for the type of ball reaction they're looking for.

When a bowling ball is made, the core of the ball is suspended in a mold; a spike holds the core in place as the material that makes up the bulk of the ball is poured into the mold. After this material hardens the spike is removed, which leaves a small hole in the ball. This hole is then filled with plug material very similar to the type used to plug and redrill balls. This plug is known as the pin, and it's normally located around the label of the ball.

This pin tells us where the stem of the core is located in two-piece balls and balls with low centers of gravity, and how the core is positioned in the ball. Until recently the pin was colored the same color as the ball because the manufacturers were trying to camouflage it, but nowadays the pin is made the same color as the ball's label. Because the tilt and position of the core in today's two-piece and low-center-of-gravity balls is so important in how a ball will roll, the pin color has been accentuated to assist ball drillers in "mapping out" how a ball should be drilled to achieve a certain reaction on the lane.

In traditional three-piece pancake weight-block balls such as Columbia U-Dots, Brunswick Rhinos, and Ebonite Gyros, and in most hard plastic balls, the location of the pin is not very important. But most of today's high-performance balls are low-center-of-gravity balls, and pin placement is important to achieve the desired ball reaction. The core of a low-center-of-gravity ball is irregularly shaped, and its stem extends from the core, with the pin being located in the center of this stem. The location of this pin shows how the core is set in the ball.

If the core is set perfectly centered in the ball, the pin will be right in the label and the stem of the core will be the top weight. This is called a "pin-in" ball. If the core is offset, or tilted, the pin would end up out of the label area a few inches off the static center of the ball, and the top weight of the ball would be created by another part of the core rather than the stem. This is called a "pin-out" ball.

Pin-out balls are not manufacturing errors; technology and ball drilling have gotten so precise that manufacturers purposely set a ball's core off from the center—even if only a few thousandths of an inch—to create pin-out balls. This is because, all things being equal, a pin-out ball will hook a little more than a pin-in ball, and bowlers are always looking for ways to get more hook and performance out of their equipment.

The location of the pin is a major factor in determining the type of roll and hooking action a ball will have. In your imagination, superimpose a clock face on the label of a ball—ball fitters and drillers use this imaginary clock face to position the pin in a certain location on the ball, so that after it's drilled the ball will give the bowler the reaction he's looking for.

For example, a ball drilled with the pin located at 12 o'clock would have the pin located right between the two finger holes or right in line with them. Most balls are built with the pin at about half past 1, so to get a 12 o'clock pin placement the ball driller has to rotate the ball and label counterclockwise to get it to 12 o'clock. A 12 o'clock pin placement enables the ball to slide along before it breaks and to finish hard, much like a finger-weighted ball. A 12 o'clock location of the pin is referred to as a "high" pin location.

On the other hand, a 6 o'clock pin placement, which puts the pin down by the thumb hole, is referred to as a "low" pin placement. In this case, the ball driller would rotate the label and pin clockwise so that the pin would be located by the thumb hole after it's drilled. This 6 o'clock position makes the ball roll early with a passive back-end reaction; a ball with low pin placement will react much like a ball that's drilled with thumb weight.

The pin can be located anywhere in between for different types of ball reactions. Most bowlers should have their balls drilled so that the pin will be located between 1:30 and 3 o'clock for righthanders (10:30 to 9 o'clock for southpaws). With the pin located



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at 1:30, the ball will react as if it has positive side weight with finger weight; with the pin at 4:30, the ball will react as if it has positive side weight with thumb weight. The more the pin is displaced from center, along with any weights configured around it, the more the reaction will be accentuated.

The pin placement and balance of the ball should complement the track on your ball. Your ball fitter and driller will be able to help you with this. Today some PBA members are experimenting with putting their pin placement close to or in their ball track. For a righthander, this would mean the pin placement would be between 7 and 11 o'clock. This type of pin placement makes the ball roll early and very evenly, with very little back-end reaction.

Remember: Pin placements and weights should help create ball reactions that complement lane conditions. If you're going to experiment a lot, you must learn what each specific pin placement does and what lane condition works best with a certain pin placement. The materials of today's balls make lane conditions change very quickly, so a ball that works for the first game may not work for the second game. Because of this, you have to be quicker to change balls and to change where you play the lanes. ●

*Bill Spigner welcomes questions from readers and will answer as many as possible in this column. Mail your questions to: Bill Spigner, Bowling Digest, 990 Grove Street, Evanston, IL 60201.*