

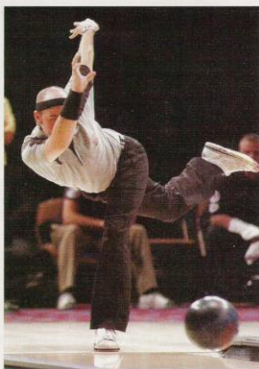


COACH'S CORNER

the hips to turn too far. When your hip position is too open, shots get sprayed to the outside of your intended target line. Instability of the hips also will cause the slide foot to become unstable, and you'll feel off balance.

A similar type of problem occurs when the heel leads the clearing motion, but the bowler also pulls down on the ball from the top of the swing. In this case, the hips are being forced into an open position by the heel and the pulling action forces the shoulders to close, causing a tug-of-war between the upper body and the hips. The net result is a major balance problem.

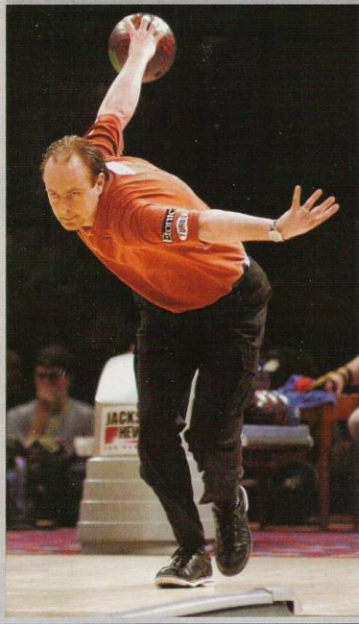
Another common movement is clearing the balance leg upward instead of to the side. Great athletes like Walter Ray Williams Jr., former Team USA star Patrick Healey Jr. and a few others kick their balance leg back and upward, and maintain perfect balance over their slide



leg. But most bowlers who do this tip forward at the waist, creating another type of imbalance.

The best technique for clearing the balance leg is to use a smooth, sweeping motion led by your toe. Keeping the toe low or grounded on the approach allows the hips to open properly and keeps your body in a stable position.

Another player who uses a variation of the Healey technique, but with more erratic results, is Ritchie Allen. By using a faster, more aggressive "kick" sideways to get his balance leg out of the way, Allen is more inconsistent in controlling the position of his hips as he releases the ball.



GOLD TIP

Many aspiring players who try to improve their game by creating more hook and entry angle to the pocket may develop bad habits that lead to poor balance at the finish.

In an effort to create more hook and rotation, bowlers will tend to muscle the ball and increase the movement of the upper torso.

If a player tries to pull the ball down from the top of their swing, the swing may bounce outside of the intended swing plane and the player will often fall off to the ball side at the

finish.

Another downside to "grabbing" the ball at the top of your swing to force the ball to hook is the tendency to cause your ball-side shoulder to close. This results in your hand going around the ball prematurely. Closing the shoulder position early will prevent a stronger release because your fingers will be above the equator on the ball. You'll probably miss your intended target to the inside, and you may lose your balance as well.

Another reason for the bowling shoulder to close early is the action of your non-bowling hand. If your non-bowling hand and arm move back past a line parallel with the approach, your bowling shoulder and arm will want to move as a counter action.

To get a better feel, try turning the palm of your non-bowling hand up and try to keep it from rotating back. This "palm-up" technique will help prevent your non-bowling arm from flying out of position, and will help your balance.

PBA star Mika Koivuniemi uses the "palm-up" technique with his non-bowling hand to keep his arm in proper position and his entire body in great balance.



COACH'S CORNER

Tips, Tricks and Bowling Techniques

WALKING A FINE LINE

GOOD BALANCE IS THE KEY TO GREAT PERFORMANCE

In every sport, the element all great players have in common is balance at the finish of their athletic movement.

In bowling, balance at the point of release is a result of good fundamentals throughout the approach. A fundamentally sound approach puts you in position to "post" the finish and hold that posed position until the ball hits the pins.

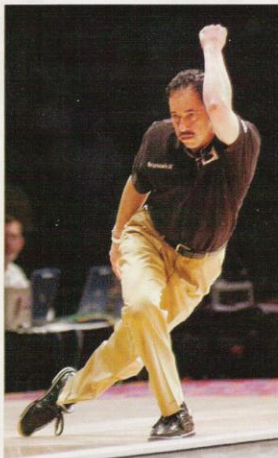


BRONZE TIP

To get a feel for balance at the foul line, USBC-certified coaches are encouraged to work with bowlers on a staggered stance with a push-away or a one-step delivery (swing-and-slide).

While both drills are great learning tools for lower-average bowlers, more advanced bowlers - especially strokers - should use the one-step drill occasionally to reinforce the feel for a balanced finish position.

The staggered stance is simply a matter of positioning your left foot slightly ahead of your right foot (for a right-hander using a four-step approach) when you get into your set position. This technique puts your body in a solid position

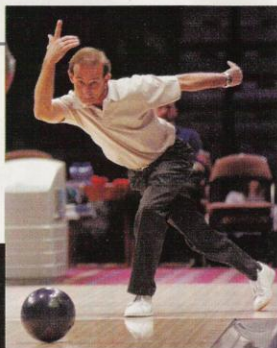


when you take your first step with your right foot, while simultaneously putting the ball into motion.

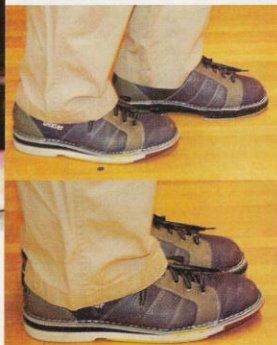
The one-step delivery isn't for everyone, but in certain situations it works great. Andy Parker, a USBC Silver-level coach from Englewood, Ohio, hurt his back and went to a one-step delivery. He averaged well over 200 and shot an 805 series using this technique.

It's simple to do: Get into a set position one step back from the foul line, with your left foot slightly ahead of your right foot (if you're right-handed). While standing motionless, push the ball out and let it swing back. When your swing reaches the top of its backward arc, step forward with your left foot and let the ball complete its downward swing into the release point.

Many senior bowlers may find the



Two players who are models for perfect balance are Parker Bohn III (left) and Norm Duke (above). Notice how both players finish their deliveries in a posed position called "posting." When you can throw the ball, strike that frozen pose and hold it until the ball reaches the pins, you're in great balance.



A simple first step toward great balance is staggering your feet slightly in your stance (top photo). When your feet are aligned side by side (above), the weight of the ball as you push it into motion is enough to throw you off balance in your first step.

one-step delivery useful because it reduces footwork and ball motion for people whose legs are no longer what they used to be. Older bowlers will sacrifice ball speed, but the one-step delivery allows them to continue bowling - in some cases with exceptional results.



SILVER TIP

Many good bowlers have a tendency to pull the ball or launch it too far to the right because of fundamental balance problems at the release point.

For simplicity's sake, let's talk about your "slide leg" and your "balance leg."

Pulling the ball often results when your balance leg fails to get out of the way of your arm swing. It's a movement called "clearing your leg" (photo A). Done properly, swinging your balance leg in behind your slide leg allows you to swing the ball close to your slide ankle as you release it.

If your balance leg doesn't clear, your body will automatically try to protect itself from allowing the ball to hit your ankle or the back of your balance leg. So



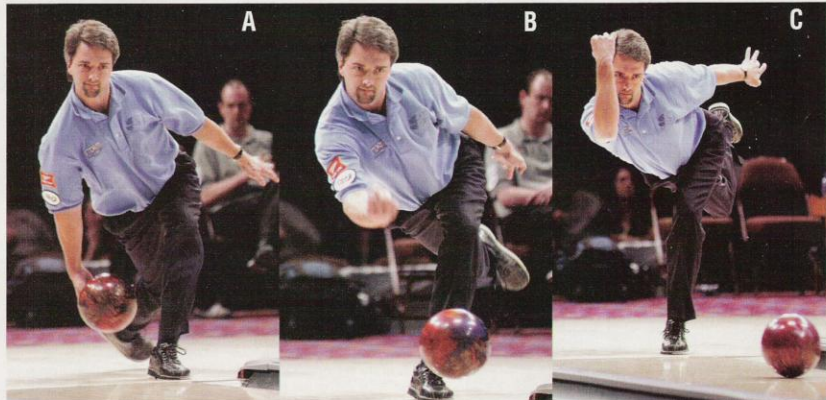
"Clearing" your balance leg, or swinging it in behind your slide leg, keeps your body in balance and gives your arm swing a clean, straight path close to your ankle (photo A). When your balance leg fails to get out of the way, your body will try to help the ball from hitting your leg. The result is a flying elbow, called a "chicken wing" delivery (photo B).

to protect you from yourself, your elbow may tend to flare away from your body — a "chicken wing" delivery (photo B). As a result, you'll pull the ball inside your intended target and, because the ball is well outside your slide foot, you'll have a tendency to fall off to the side.

When the weight of the ball is out outside your balance line, your body will

instinctively move in the direction of the imbalance to keep you from falling down.

Consistently projecting the ball too far to the right may be caused by an overly aggressive "clearing" motion with your balance leg. Typically, you throw your heel to make your balance leg clear, but an exaggerated motion also causes



Great players, like former Team USA star Patrick Healey Jr. defy the textbook on technique, but still demonstrate the essence of great balance. In photo A, the ball is close to Healey's ankle as his balance leg "clears" or sweeps in behind his slide leg. In photo B, Healey's balance leg is cleared and his toe is pointed outward. In photo C, he kicks his balance leg up behind him to retain balance. He's successful because of years of practice. Players who lack that physical talent are better off using the textbook technique of anchoring their toe to the approach.



PRO TIPS

by Team USA Head Coach Jeri Edwards



FIRST STEP TO GREAT BALANCE IS, IN FACT, THE FIRST STEP

All bowlers strive to accomplish great balance at the moment of ball delivery. When you arrive at the foul line in perfect balance, your legs and upper body are in a strong position, your arm swing is fluid and you can make consistent, accurate deliveries.

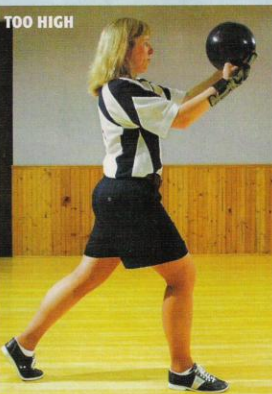
You may not realize, however, that your first step and ball movement make that possible. Let's compare the first motion situation to the three bears: one movement is too high, one is too low and one is just right.

In our photos, Team USA 2005 members Lisa Noor, Lynda Barnes and Shannon O'Keefe illustrate the three movements.

TOO HIGH

Lisa Noor demonstrates a common approach flaw among women: taking an extra-long first step while pushing the ball up and away to set it into motion. Women in particular tend to employ this motion to feel as if they're gaining speed in both their approach and arm swing. In fact, it works the other way. The up-and-away motion creates a long, looping arm swing that's very difficult to control. It also triggers late timing. And the extra-long first step often causes a bowler to take shorter, choppy steps toward the foul line, slowing the approach rather than building momentum.

TOO HIGH



TOO LOW

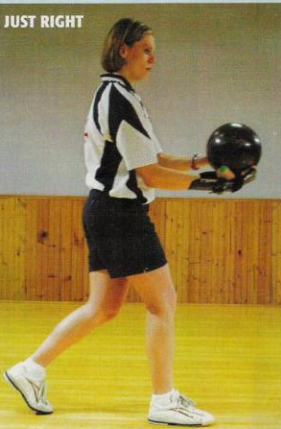


TOO LOW

Lynda Barnes demonstrates the opposite: by dropping the ball too quickly and taking an extra-short first step. Allowing the ball to drop prevents it from swinging into a smooth, natural arc and requires the bowler to use arm or shoulder muscles to move the ball through the swing. The short first step with the ball back quickly creates "early" timing, often demanding very fast footwork to keep up with the ball. Plus, a weaker delivery usually results.



JUST RIGHT



JUST RIGHT

Shannon O'Keefe exhibits the perfect position: feet staggered, knees slightly bent, upper body tilted just a little to promote forward motion. As she takes a measured, natural first step, she also pushes the ball forward the same distance – and at the same time – as her step. This well-timed, naturally-balanced matched set of movements allows the ball to fall into a free, easy swing arc and the feet move forward at a natural, relaxed pace.