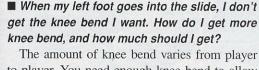


Moes-Jeph Reaction



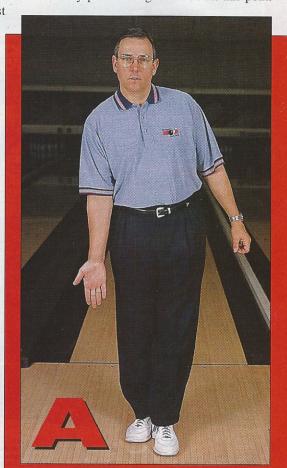
The amount of knee bend varies from player to player. You need enough knee bend to allow you to release the ball close to the lane. Just before you release the ball, it should be about three to six inches off the floor. This would put the bottom of the ball somewhere around the height of your ankle at the release. You need the right combination of knee bend and spine tilt to accomplish this.

The first thing to think about is that your left shoulder needs to be over your sliding knee at release (for righthanders; it's the opposite for lefthanders). You can stand straight up and have your shoulders over your knees, but you will release the ball from a rather high position. To see how to get your body in the right position, do the following: Stand in front of a mirror and start from an upright position (A). As you face the mirror, lower your body as you would during your throw (B)—lower your hand to the release position, hold your other arm out to your side for balance, and push your trailing leg out behind you and off to the left (for righthanders). Lower your throwing arm so that, with an outstretched hand, your fingers are even with your ankle. The shoulder of your throwing arm needs to be lower than the other shoulder.

Performing this exercise makes it easy to understand how difficult it is to get your body into the release position from a standing position. You get a great feel for the balance problems and the strength it takes to get into a good leveraged position to release the ball.

Now, how do you get your body into this position while in motion? You need to progressively lower the body on the way to the foul line. You can't wait until the last step to start thinking about getting some knee bend. One

helpful movement to remember is to lower the hips on the step *before* the slide. As the sliding leg passes the other leg on the last step, both legs need to be bent the most they are going to bend at any point during the shot. At this point



Begin the exercise by facing yourself in the mirror with the palm of your bowling hand facing forward and the other arm at rest.

Need some help with your game? Bill Spigner welcomes questions from readers. Mail your questions to: Bowling Clinic, Bowling Digest, 990 Grove Street, Evanston, IL 60201.

the opposite leg will start to straighten out to help keep the upper body over the sliding leg. As the ball gets to the release zone, the bottom of the ball should be about ankle-high.

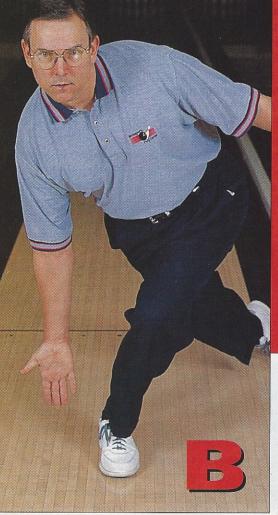
Many people look at their finishing position to see how much knee bend they get. But in the finishing position, many bowlers' legs are straight because they use the leg to help lift the ball. As they release the ball, the knee starts to

By BILL SPIGNER

Won't Help Your Game

straighten out. This motion acts as a source of power for the release. So your finishing position is not the best indicator of how much knee bend you're getting. The best way to see what's going on in your game is to get videotaped. Use side

Lower yourself into a simulated release position. The fingers on your throwing hand should reach ankle level. The shoulder of your throwing arm should be lower than the other.



The side view shows that the shoulder of your throwing arm should be over your

and back views to see the positions of your body on the last two steps of the approach. Remember, though, that you need to be careful; an especially deep knee bend is not all it's cracked up to be. The deeper the knee bend, the more

sliding knee at the release point.

forward tilt the upper body needs to keep the shoulders over the slid-

ing leg at release. Our physical makeup will determine what we can and cannot do.

■ I am a 20-year-old who averages 212 in league play. Are there any bowling camps on the East Coast for adults? Would it be useless for someone with a 212 or higher average to attend one of these camps?

Attending one of the programs available today would definitely be a positive experience. You're still in the early stages of your bowling life. The game can be quite deceiving: The better you get, the harder it is to get betterand the more you'll need to know to get better. Bowling and golf are similar sports: It takes years to acquire the maturity. knowledge, and ability to be able to play conditions the right way. Having a 212 average in your local league is good, but to be able to average 212 under a variety of conditions is not easy; new learning experiences can certainly help.

I started my professional teaching career in 1979 when Don Johnson got me a job as an assistant teaching pro at Professional Bowling Camps. Johnson is not only one of the best bowlers who ever lived (he's a member of the ABC and PBA Halls of Fame), but he's one of the best teaching pros there is. My first year with PBC I worked one week as an assistant pro. The second

year I started a PBC camp with Red Burnham, the general manager at Bradley Bowl in Connecticut. He's a great friend and a supporter of the sport of bowling. Red and his staff hosted the PBC program for 10 years. When I first started with that program, I realized how much I didn't know. Ever since, I have had a continuing learning experience. I'm still in the learning process, with respect to playing the game and with respect to becoming a more knowledgeable teacher. I think that any bowler who wants to get better and doesn't have the availability of a good teaching pro can benefit greatly from attending one of the camp programs.

These programs offer so much—they can take years off the learning experience for players at any level. At the beginning of each of his programs, Johnson would offer the students their money back if they didn't learn anything. Nobody ever took him up on the refund.

PBC is no longer in existence, but many of today's teaching stars had a start with PBC or were in some way touched by those who have had the opportunity to get their basic training from that program. More than ever before, bowlers have the opportunity to get professional help. Here is a list of some of the programs available:

Dick Ritger Gamps. These clinics run year-round in many different sites around the world. In the USA, call (800) 535-0678; outside the USA, call (607) 257-0678.

Professional Bowling Instruction. This is a program led by Michelle Mullen and Don Moyer. Call (888) 343-2695.

Carmen Salvino Bowling Clinics. For more information on the clinics run by this bowling great, call (847) 619-6282.

ABC/WIBC CATS (Computer-Aided Training System) Clinics. For information, call (414) 423-3497.

Super School. This is a new program that was started last summer and brought together many of the top instructors in the country for a one-week bowling-instruction extravaganza. The camp attracted 170 people—from all over the United States and some foreign countries—to Taylor, Mich., a suburb of Detroit. Super School '98 will be run at the National

Bowling Stadium in Reno July 5–11. If you want to be treated to a Who's Who of the teaching world, this is the program for you. Call (800) 282-7043.

This is, of course, just a partial list. Keep your eyes and ears open for information on other programs.

Instructors with years of experience run these teaching programs. The camptype programs are especially fun because they give you the opportunity to spend time around a lot of people with common interests. It's a great opportunity to share knowledge and make new friends.

■ I have a reactive urethane bowling ball. After experiencing several months of great bowling, the ball reaction changed. The ball changed radically; it would not hold the line, and it wanted to break early. I took the ball to a pro shop, and I was told that the track was worn out. There were little white slashes all the way around the ball track. I was advised to have the ball resurfaced every six to eight weeks. At \$25 a shot, this will get pretty expensive. Is the pro shop telling me the truth? Is there something I could be doing to the ball to repair or fix this? Lustre-King cleaners are few and far between where I live.

Unfortunately—for you and for many other bowlers—the pro shop operator is telling you the truth: The ball needs to be refinished every six to eight weeks. The reactive-resin urethane balls are more prone to surface changes than their regular urethane predecessors.

Wood lanes cut a ball track in the ball much faster and deeper than synthetic lanes do. Today's balls get a ball track cut into them much the same way the old Yellow Dots used to. When we used Yellow Dots on the tour during the last half of the 1970s, we had to resurface the balls every six games in some bowling centers. That's not a reasonable thing for a league bowler to have to do.

You can't prevent the ball from tracking if you keep bowling at the same bowling center. It's not the fault of the bowling center that this happens; it's part of our bowling environment. I would recommend you work out some kind of a program with your pro shop operator to have the ball serviced on an ongoing

basis. If you were to have the ball lightly sanded every couple of weeks before a deep track develops, the ball would last longer. Also, it's a lot less work for the pro shop, and the fees to do the job could be slightly less in the long run. By maintaining the surface of the ball, you'll assure that the performance of the ball will be more consistent for a longer period of time.

Changes in the lanes can also affect ball reaction. Wood lanes change as they are used. The head area gets beat up from the pounding of the balls. As the season wears on, the lanes wear, which makes the ball hook earlier. The ball you are using is a low RG (radius of gyration) ball with an aggressive cover stock. These balls rev up quickly and like to cut through the oil. Because the heads want to grab the ball quicker than they did earlier in the season, you're likely to need a ball change to get your throws to slide more easily through the head area.

You should think about adding a medium RG and cover-stock ball to your arsenal. If the drilling you have in your current ball works well for you normally, I would advise putting the same type of drilling in the new ball. If the drilling you have was designed for a specific condition and doesn't allow you to play a reasonable range of lane conditions, you may need to drill the new ball differently. First, you are looking at the new ball to get through the heads. After that, you have to think about the back-end reaction of the lane condition. If the lane condition has very strong back ends, you may want an arching-type drilling. If the back ends are tight, you may need a drilling that will give you a stronger back-end finish. You'll have to work with your pro shop operator to come up with the best solu-

For most bowlers who will be using only a couple of pieces of equipment, I would recommend staying with simple drillings. Use drillings that allow you to change how you throw the ball a little, and the ball reaction will change based on the change you made. You don't want drillings that are condition-specific. You narrow the range of conditions you can face when you use a ball that was drilled for a specific type of shot. •