

BowlersJournal

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BREAKDOWN

FULL TILT

ALIGNING YOUR
RELEASE AND
UPPER BODY

**PBA TOUR
CHAMPION**
KYLE SHERMAN





Angle of Attack

At the release, Kyle Sherman features one of the more distinctive body positions among pros.

A MATTER OF DEGREES

by **BILL SPIGNER**

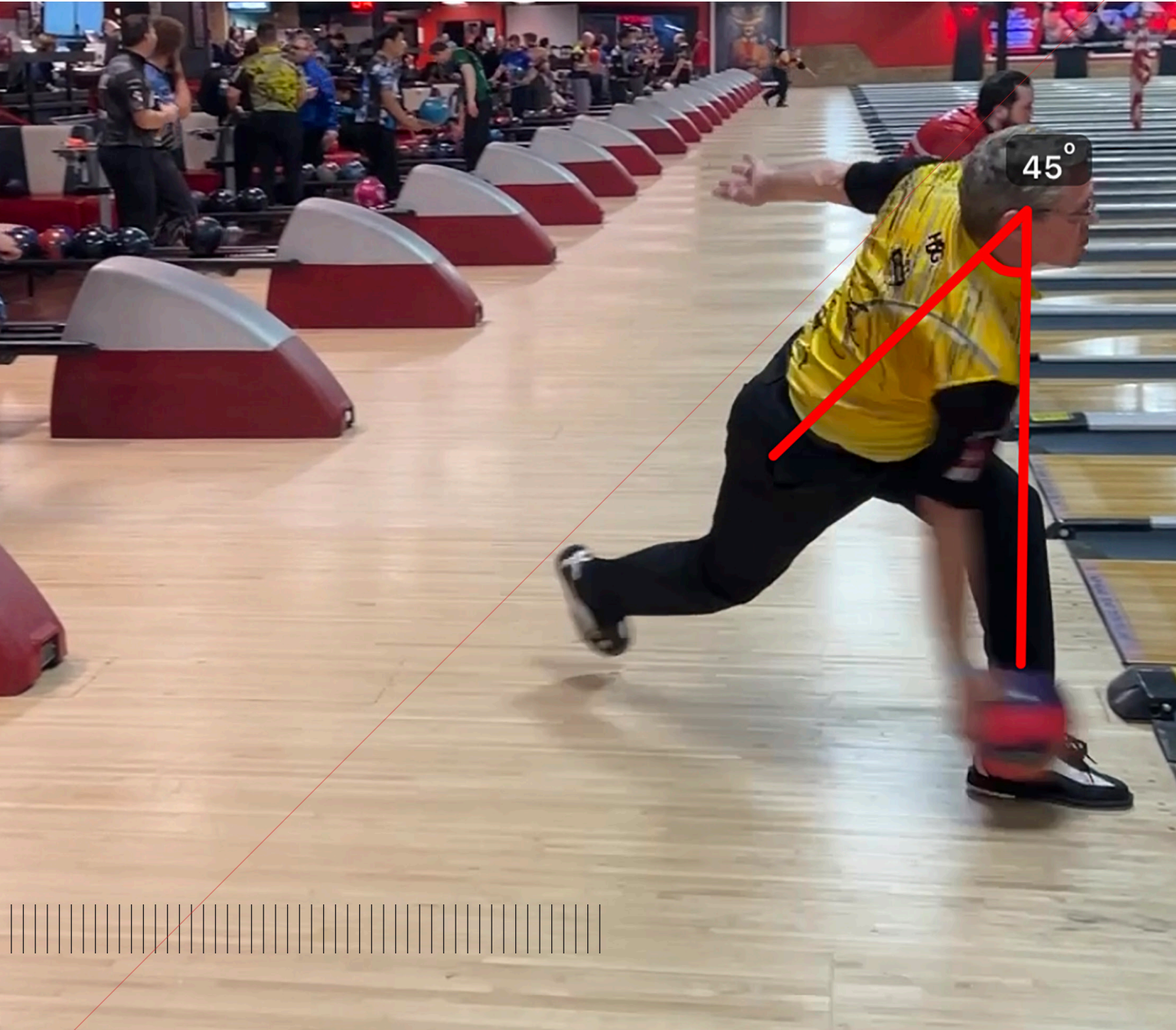
Why it's time to check the alignment of your release and your upper body.

One of the many factors that make bowling unique is that it is an invisible sport. We cannot see the playing conditions with the naked eye, nor can we see or measure our physical game during the process of rolling a ball. So it is no surprise that one of the most fundamental aspects of success in bowling — aligning one's release with one's body position — also happens to be among the least discussed topics in our sport. The reason? Like so many other variables in our sport, you can't see it — unless you invest the time and resources to study photo and video of yourself, ideally under the supervision of a certified coach.

Hinging this alignment of release and body position are the shoulders, which exert a huge influence on both direction and release. The function the shoulders play in one's game varies depending on a bowler's individual style. The one-size-fits-all approach to this aspect of the game, which arises from the common misconception among average bowlers that the shoulders need to be level and face straight ahead, easily can lead one astray. While that idea has some truth to it, it does not cut at the core of the role one's shoulders play throughout the approach and especially at the release.

The Natural

Chris Barnes always has had the best body angles and timing to utilize a wide range of skills with the least amount of physical effort.





Side Tilt and Forward Tilt

The bottom line is this: The shoulders, which for our purposes here include the whole upper body, need to have enough side tilt to enable the arm and ball to swing back, and then forward, under the head at release. While the amount of side tilt will vary depending on the style of the bowler, here's a general rule of thumb: The straighter the player rolls the ball, the less side tilt is needed. Conversely, the more a player hooks the ball, the more tilt is needed.


But that is just one part the shoulders play in this equation. In addition to side tilt, there also is the upper body's forward tilt, which again will be determined by a given bowler's style. Are you detecting the theme here? It's this: Upper body angles are determined by the release the player develops, and the two need to work hand in hand.

Which gets us to the chicken-or-the-egg question underlying all of this. Which comes first? Do you build your upper body angles around your release, or do you build your release around your upper body angles? Well, the truth is that there is no clear cut answer. But let's dig a little deeper.

Mix and Match

Average league bowlers would be wise to build their hand positions around the upper body angles they established when developing a repeatable, simple, free-flowing approach. For the player developing a tour game, which requires a lot more power and the ability to play a wide range of angles, matching your upper body angles to the release needed to play at the sport's highest levels is the way to go.

A closer examination of the styles of a few one-handed pros should provide a better idea of the ranges of side tilt and forward tilt players can have based on their respective styles. For the straighter players — bowlers typically requiring less side tilt — a couple of greats in Parker Bohn and Shannon O'Keefe come to mind. They



feature similar side-tilt angles at release, about 28 degrees. In forward tilt, however, they are much different, with Parker at 42 and Shannon at 23.

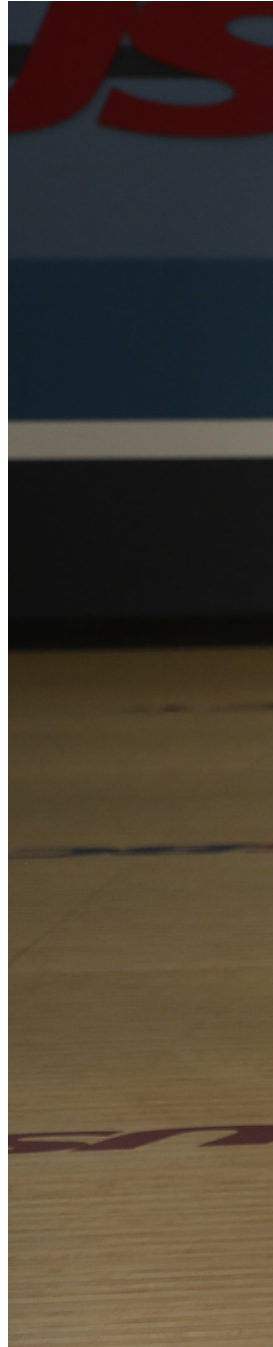
For the medium type of player — those occupying the middle ground between straight games and high-rev styles — there's no one better to use as a model than the great Chris Barnes. The 19-time PBA Tour champion always has had the best body angles and timing to utilize a wide range of skills with the least amount of physical effort and, in his case, also longevity.

His forward tilt at the release is 45 degrees, which I have always thought was the perfect angle, and he has a 43-degree side tilt at the release. The reason I believe 45 degrees of forward tilt to be ideal — especially given the correct amount of side tilt to complement it as Barnes has — is that it allows his bowling arm at the release to be perpendicular to the floor. At the same time, his hand is at the ankle, which allows him and others with the same forward tilt to release the ball out in front of the slide foot and onto the lane on a flat plane to complete the release without hitting up on the ball.

For a more extreme example, we have two-time PBA Tour champ Kyle Sherman, who is shown in the images at a 52-degree forward tilt (last page) and a 48-degree side tilt (opening image). Kyle's upper-body angles developed naturally with the evolution of his release and the work he has done to establish a very loose swing. A lot of the time, players who work on developing a strong release unknowingly create the upper-body angles needed to complement the release and a free swing so that the ball feels weightless. For young players, it's paramount to develop a strong release and then refine their game around it.

Left to their Devices

While bowlers generally should have more forward tilt than side tilt, there are exceptions, like Shannon O'Keefe and Liz Johnson, which are not common. In both cases, these players have incorporated the use of a sophisticated wrist support that helps keep their wrist steady through the release to help them release the ball out in



Exception to the Rule
Shannon O'Keefe is able to deploy more vertical spine angles, with her forward being less than most, because of her deep knee bend and forward knee extension. This is difficult and demonstrates very good use of her strong legs.



3 THOUGHTS FOR

Each of these star youth bowlers — Abigail Starkey, Winston Petri, and Brandon Caruso — features a different style and accompanying alignment of upper body and release. A little comparison here of yourself to each of these players should help you determine the upper-body

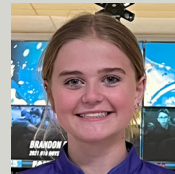
angle and hand position that best accommodates the style of player you happen to be.

A helpful comparison requires that you focus on a few key things here. In each of these images, notice where the ball is relative to the head. Also note the position of the fingers.

1



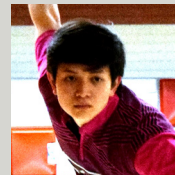
For the straighter player (Abigail Starkey), the center of the ball, shown from a rear view, is under her right ear and the fingers are above the equator. This may be a “straighter player,” but don’t let that fool you: She has good revs, a very strong roll, and is deadly accurate. She just tends to keep her angles straighter.



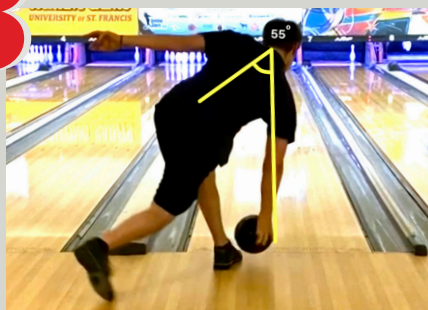
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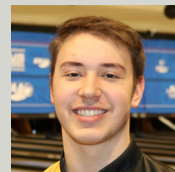
For the medium player (Winston Petri), the center of the ball is directly under his head and his fingers are on the equator with the arm in a more inside-out direction. The combination of these positions provides more revs and hook.



3



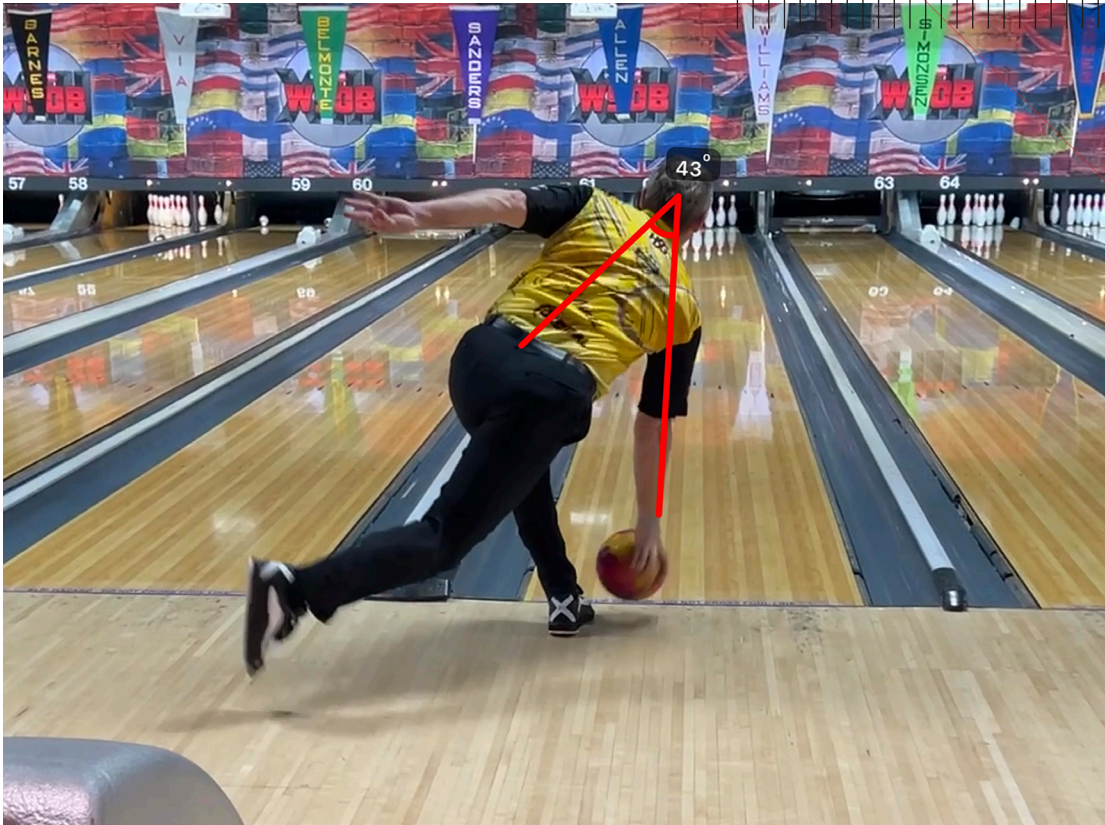
In the case of the higher-rev player (Brandon Caruso), the center of the ball is under his left ear and his fingers are well below the equator, while the arm is traveling more inside-out. This produces the most revs and hook of the three models.



Regardless of the direction you want to try and take, your natural body positions and strength have a big effect on what you can do. Yes, you can make changes, but those changes will require thought, hard work, time and, above all, patience.

If you find the changes you are trying to make

are very hard physically to do, and the ball feels heavier, there is something wrong with how you are doing it. If it feels easier physically but much harder mentally, you are going in the right direction. Again, be patient. You are retraining your brain to accept the new body positions you are trying to implement. That takes time.



XXXXXXX
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front of them onto the lane.

When their bowling arm is vertical before the release, it's behind the slide leg — an old-school tactic that was good for playing straight up the lane and using lift with little axis rotation. In today's game, you need a very strong release and the ability to play inside-out angles. For Shannon and Liz, this is where the wrist device comes in handy, as it helps them play inside angles more effectively.

The one thing they do to complement their more upright forward spine position is use a lot of knee bend with the knee moving forward of their slide foot. This is called knee continuation. Getting this kind of knee bend with the finish of the knee going forward is hard, as it requires very strong legs and core.

Don't get me wrong here: I am not against wrist devices. They are very effective for those players who use them to enhance their game. At the same time, I do see many bowlers use them when they really

don't need to. Some don't really know why they should or shouldn't use one. In the cases of Shannon and Liz, with their unusual ratio of forward tilt to side tilt, both have developed great games in which the wrist device merely is a tool to enhance it. No one can doubt that, with their proven athletic ability, they would enjoy plenty of success even without that tool in their arsenal. They just probably would feature different upper-body angles and knee bend.

The moral here is to use a wrist device wisely, as they can be a great help. At the same time, they will not make someone something they are not. Only very hard work will do that. Wrist devices fine-tune your game; they do not make your game.

Turn, Turn, Turn

Now that we know the range of upper body angles that are best for the style of player you become based on your release, we have



Sherman's March
 Kyle Sherman, shown here at a 52-degree forward tilt, provides a more extreme example of tilt that complements his free swing to make the ball feel weightless.

another important question to ponder: How do your shoulders influence your turn/axis rotation?

Most think the wrist turns the ball, one of the most common misconceptions prevailing in today's game. Actually, it's the upper body that does this work. Yes, turn is initiated from the shoulders. The bowling-side shoulder lowering and moving forward through the release turns the arm, which in turn rotates the hand. Sure, you can cock and un-cock the wrist for some rotation, but the major factor in turning a ball is the shoulders and swing path.

Two-handers tend to feature more upper-body angle than one-handers, with the minimum amount somewhere in the neighborhood of Belmonte and Troup, who respectively have about 62 forward and about 54 side.

On the extreme end is Jesper Svensson, with about 75 forward and 68 side. Players with Jesper's more acute upper-body angle tend

to roll the ball faster and have less flexibility with creating different shot shapes because their body is a little out of balance with their legs. The two-handers don't use their shoulders/upper body as much for turn as the one-handers. Their swings are more inside-out and their palm is under the ball which, coupled with a little wrist cock, produces the turn when they roll the ball off the hand.

End Game

Arming yourself with the knowledge of how upper-body angles influence the release can help keep you from the pitfalls of trying to develop a release that doesn't match what your upper body is doing, or you can develop the right angles to support the release you are trying to develop. Using video is a critical tool to see what you are doing, as is getting coaching to help you understand what you are doing and how to look at it. ■