

The use of technology to help with the line of delivery skill development; by Tony Zummack, National Coach Wheelchair Curling

This curling season has seen the use of lasers in our on ice training at both the development level and performance level programs. The lasers have been used previously but as a spot laser on the stone which is quite different than the full line laser which is what I will discuss in this article.

Before getting into the theory behind the lasers I want to be clear that this technology will identify the current skill level of an athlete to slide along their intended target line and then deliver the stone along that same line. In itself it will not correct any delivery faults, only identify them. It is still the responsibility of a good coach to identify the problem and apply the proper cause and effect explanation and drills to help the athlete improve their skill set.

The curling stone is intended to travel along a straight line from the hack position through the skips brush. This is important to understand as it can influence how the athlete sees the path of the stone in their mind's eye. *Diagram 1*

Once the stone starts to lose momentum and the friction of the rotation increases the stone then begins to curl, this point should always be after the stone travels thirty six feet from the near hog line (half way on the sheet of ice). *Diagram 2*

The importance of the athlete travelling precisely behind the stone as it moves on this intended path is critical to achieving the desired outcome, a stone delivered straight at the brush. *Diagram 3*

At this point it is important to ask you the question; what is the path of the stone travelling in your mind's eye? If it is not a straight line then I believe you will continue to struggle with this concept and also struggle with the development of the skills required to slide as precisely as I have described above.

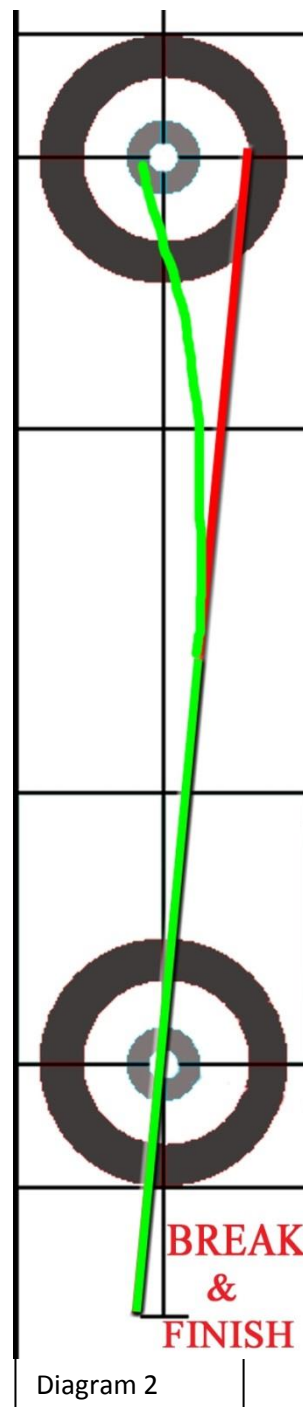
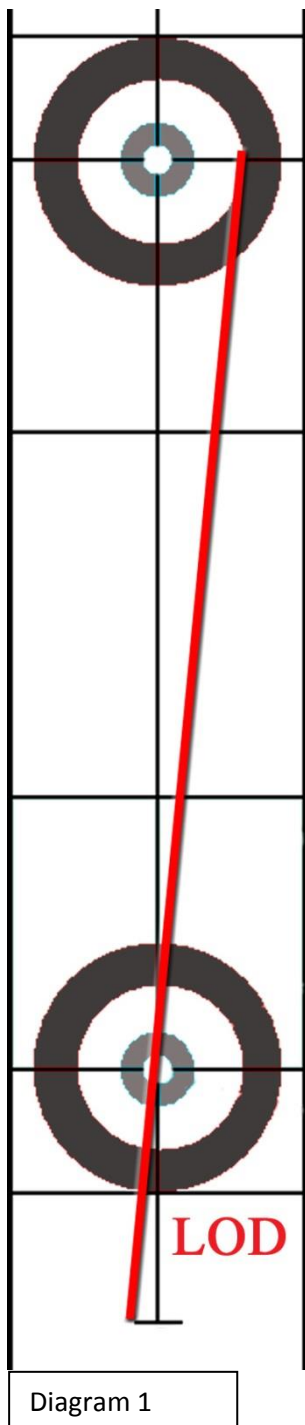
Now let's look at what the effects are when the body slides in a different direction than the intended path and how that affects the stone trajectory.

When the athlete slides wide of the intended target line then at release the mind's eye compensates for you by making the adjustment required. Your brain calculates the misdirection and at release you adjust by changing the stone bath back towards the brush. This will affect the path of the stone by curling sooner than expected and at times this can look like the stone had a pick up. *Diagram 4*

When the athlete slides tighter than the intended target line then at release the mind's eye compensates for you by making the adjustment required. Your brain calculates the misdirection and at release you adjust by changing the stone bath back towards the brush. This will affect the path of the stone by curling later than expected and at times look like the stone caught a ridge and even falls off the intended line. *Diagram 5*

So, what does the laser line do? It allows both the coach and the athlete to SEE and FEEL the same delivery and identify what was the actual cause of the imperfect delivery and make the right adjustments.

It is my belief that a curling delivery has three main components; correct Balance, correct Line of Delivery and correct Release. The laser line can help determine which of the three components the actual cause of the fault is. I consistently see athletes and coaches trying to fix a symptom and not identify the main cause of the problem they are trying to sort out. Allow the laser to do its job and show you how well both the athlete and stone stay on the intended target line, then identify the root cause of the problem and begin to address the changes required to improve.



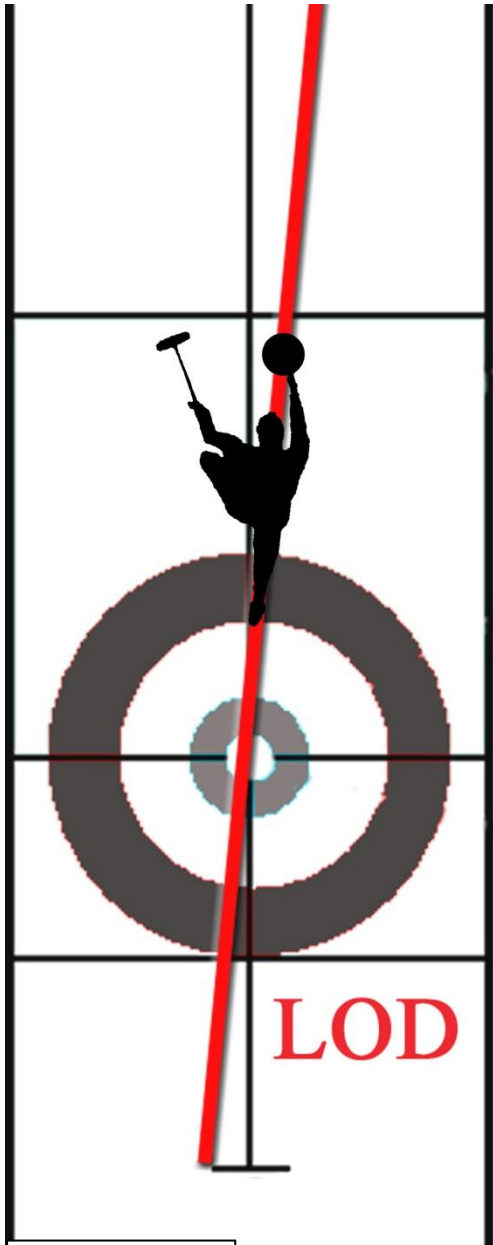


Diagram 3

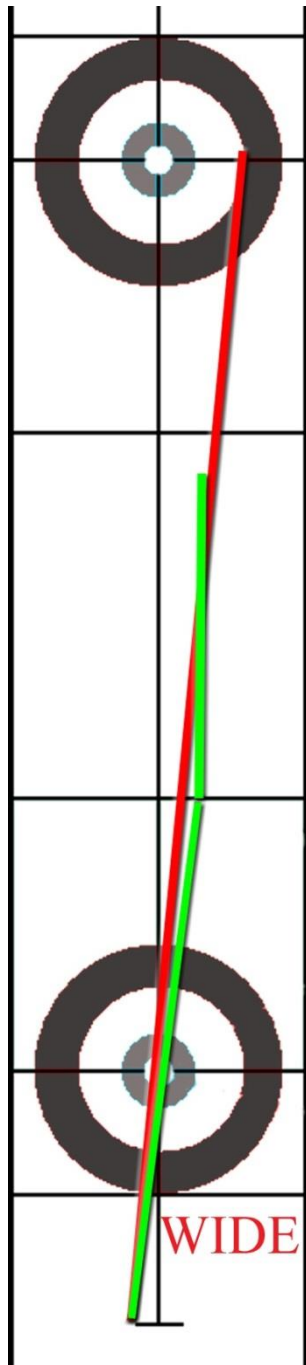


Diagram 4

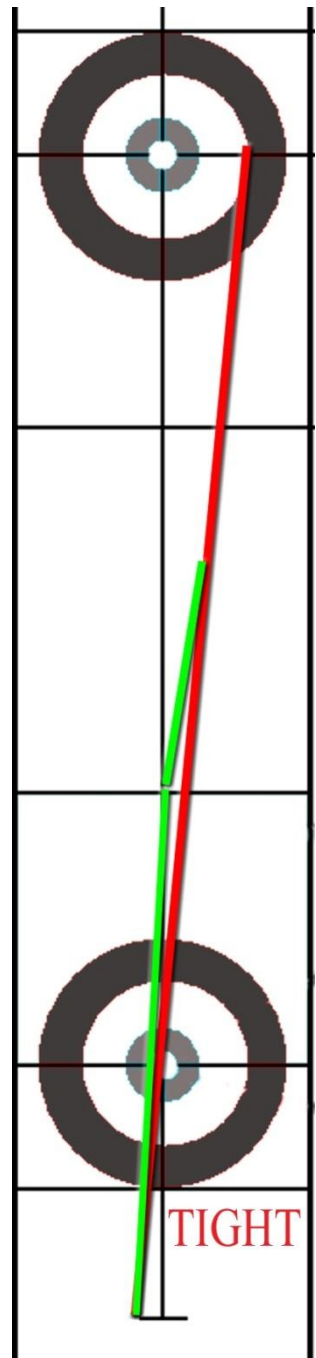


Diagram 5