

Use the Force (Plate)

Force plate technology will improve your footwork and balance

BY BILL CHOUNG

Tiger Woods' new swing, developed by Sean Foley, is more fundamentally sound than ever. His improvement in his footwork and balance has given him power and accuracy, and his right knee is firing in correct sequence down the target line more efficiently now, which prevents him from getting stuck inside. Getting stuck inside always leads to unpredictable ball flights.

Like Tiger, all golfers should focus on their balance and footwork to improve their swing. But most golf instructors ignore the footwork and balance in their teaching because they do not have the proper analytical tools to measure balance and how efficient footwork could lead to more clubhead speed or accuracy. Why? The force plate, which measures balance, has been around for decades but was too costly for instructors. But now, like any technology, the price has dropped and the technology is available to all golfers.

The force plate technology measures the force distribution on the front, back, right and left of each foot, which helps us quantify the impact of balance on the golfer's performance. The integration of the force plate to the video and launch monitor technology give instruc-

tors/clubfitters valuable information to provide proper instructions and fittings. The force plate is synchronized to the swing video and launch monitor. Therefore, the effect of poor balance and weight shift can be quantified to inefficient clubhead speed, ball speed and other crucial data to maximize your performance.

Correct Balance at Key Positions

We have been doing biomechanical research with force plates for 10 years. Here are some key findings:

Set-up

- ▶ A proper set-up will minimize compensatory moves in your swing.
- ▶ The body weight distribution should be 55 percent back foot and 45 percent front foot.

Top of the Swing

- ▶ As the arms are moving towards the rear foot to build up tension in your back muscles, 65 to 75 percent of the weight should be on the back foot and heel.
- ▶ Most golfers have too much weight on the toes, which alters the spine axis.
- ▶ The swing plane is not maintained.

Downswing

- ▶ When the shaft is at horizontal position, the weight distribution should be 40 percent rear foot and 60 percent front foot.
- ▶ The center of gravity should move from the in-step of the rear foot to the in-step of the front foot.

Impact

- ▶ Seventy-five to 85 percent of the weight should be on the front foot.
- ▶ The center of gravity should be on the outside and at the heel of the front foot.
- ▶ The proper weight distribution at impact could increase your driver clubhead speed by 10 miles per hour and 25 yards.

Finish

- ▶ Eighty-five to 90 percent of the weight should be on the front foot.

If you are thinking about taking a lesson this year, find an instructor using a force plate to uncover how balance works during a golf swing. You will be amazed how good footwork and balance demise some of your major swing faults.

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