

Attack Angle



The up or down movement of the club head at the time of maximum compression. Attack angle is measured relative to the horizon.

Shots hit off the ground should have a negative attack angle in order to optimize the trajectory. However, golfers with slower club speeds should be careful not to hit too much down (negative attack angle) with their irons.

To maximize distance with your driver, hitting up on the ball (positive attack angle) is a must. The driver's loft should be chosen so that it complements the golfer's attack angle and club speed. Having a positive attack angle does not guarantee maximum distance. The fit of the club is also an essential piece of the puzzle.

Technical Definition:

Attack Angle – The vertical direction of the club head's geometric center movement at maximum compression of the golf ball

Tour Averages

PGA TOUR

Driver = -1.0 degrees

6 iron = -4.1 degrees

LPGA Tour

Driver = +2.0 degrees

6 iron = -2.3 degrees

Male Amateur (Driver)

Scratch or Better = -0.9 degrees

5 HCP = -1.1 degrees

10 HCP = -1.2 degrees

Average Golfer (14.5) = -1.8 degrees

Bogey Golfer = -2.1 degrees

The standard assumption for attack angle is 0 degrees for the driver; whereas, the standard assumption for 6-iron and PW is determined based on the TrackMan Optimizer. The optimizer looks at club speed and trajectory type to determine the optimal attack angle. If trajectory type is not stated, then mid-trajectory is assumed. A mid-trajectory along with the standard assumption for club speed is used to determine the attack angle for each club type. That results in the following values.

6-iron = -3.2 degrees

Pitching Wedge = -3.9 degrees