

Basic Mechanics of Kicking

The description is for a right foot kick.

Preparation Phase

- Start behind and to the left side of the ball
- The left foot steps forward beside the ball (leave the right leg hyper-extended back). Plant the foot a shoulder width distance which will allow the right foot to swing through when ready.
- The left leg is slightly bent, the quad is engaged, the center of gravity is over the single foot, and balance is achieved.
- The core is engaged and the arms are abducted from the body at a distance that will assist the balance of the body.
- The right thigh is hyper-extended posteriorly and the knee is bent (flexed).
- As Technique Increases:
 1. The kicker makes a multi-step approach to create speed and inertia into the ball and the overall force of the kick.
 2. The approach is angled to attack from the side of the ball.
 3. A backside lean over the left foot as the right leg swings forward will add to the force of the kick as the body moves forward (adding inertia) with the leg.

Force Production Phase

- The left foot maintains friction forces with the ground so that there is a stable base for the forces of the kicking leg.
- The thigh of the right leg forcefully flexes forward while the knee maintains its position of flexion.
- Just as the right thigh approaches the midline of the body, the leg (knee joint to foot) whips forward (extends) in anticipation of kicking the ball.
- The left leg remains slightly bent, the quad is engaged, the center of gravity is over the single foot, and balance is achieved.

Critical Instant

- The summated force comes from the weight shift forward, right hip flexion, and knee action (knee extension) which forcefully swings the foot forward.
- Contact is made with the instep/laces area of the shoe.
- Contact with the ball (critical instant) is made at the center of the arc of the swinging leg.
- The leg is moving the fastest at the center of the arc of the swing.
- If the leg is stopped right after contact, the leg will have started slowing down well before contact with the ball is made.
- The center of gravity is over the single foot base at the time of the critical instant.

Follow-Through/ Recovery

- The now straight right leg continues to swing forward bringing the foot up to waist height before it steps forward.
- The center of gravity continues to move past the left foot (the base) as the body continues moving in the direction of the kicked ball.
- The right foot will contact the ground, the center of gravity will now be over this new base, and the body will return to a balanced state.