Why Train the Feet?

During movement, the body naturally pushes through the big toe as the final point of force transfer. This helps with balance, stability, and efficient movement. The big toe is the best spot for force application because it provides a strong and stable base. Our nervous system is designed to favor this movement because of how our muscles, fascia, and feet work together like a spring. This improves coordination and allows for smoother strides and quicker changes in direction.

With every step, the foot absorbs and redirects force through three key phases. First, it absorbs impact by slightly bending and storing energy. Next, it stabilizes by locking into position, preventing unwanted movement. Finally, it releases the stored energy, pushing the body forward or into the next step.

The Spring Ankle Torque Device helps strengthen the stabilization phase, which is important for quick changes in direction. It improves control and muscle coordination, making movements more powerful and efficient. By strengthening these key positions under controlled conditions, it helps athletes build resilience, transfer force better, and move more effectively.

By reinforcing the body’s natural tendency to push through the big toe, this device helps athletes improve performance and reduce the risk of injury.

The Spring Ankle

A strong foot and ankle are important for absorbing force and generating power, especially in sports that involve sprinting and quick movements. Good training should work all the muscles and structures that help the foot function properly. The Spring Ankle Torque Device is a great tool for this because it strengthens the foot and ankle in eight sport-specific positions. This helps athletes build strong, responsive feet that return energy, improve speed, reduce injury risk, and make movements more efficient.

Key Considerations for Training the Foot and Ankle

- **Most Training Focuses on the Hips and Knees:** Traditional workouts focus more on the hips and knees, often ignoring the feet and ankles.
- **Weak Feet Can Limit Performance:** If the foot and ankle are not strong, an athlete may struggle to absorb and generate force properly.
- **The Body Protects Itself by Holding Back:** When the feet and ankles are weak, the body automatically reduces power to avoid injury, which slows down performance.
- **Good Foot Function Helps with Power and Balance:** A strong foot and ankle improve force transfer, stability, and injury prevention.
- **Sports Are Unpredictable:** Athletes move in different directions at high speeds, so foot and ankle strength must be trained in a variety of ways.
- **Stronger Feet and Ankles Improve Speed and Agility:** Athletes who strengthen their feet can sprint, cut, and jump more powerfully and efficiently.

By implementing foot and ankle training into a program, athletes can improve movement efficiency, prevent injuries, and unlock greater speed and power potential.

Exploring the Power of Spring Ankle Torque Training

In competitive sports, every second matters, and athletes are always looking for ways to get faster and stronger. One exciting new training method is the Spring Ankle Torque Position system, created by top sprint coach Chris Korfist. Chris has trained athletes at all levels, from young students to NFL professionals, and he designed this system to improve speed, power, and overall performance. The Spring Ankle Torque system does much more than just make athletes faster. It helps improve movement, prevent injuries, and build stronger, more efficient feet and ankles.

Here’s what makes it a game-changer:

- **Improved Balance and Coordination**: By enhancing sensory feedback from the feet, this training boosts proprioception—the body’s ability to sense its position—helping athletes move with precision.
- **Joint Stability**: Strengthening the muscles and ligaments around the foot and ankle improves stability, which is essential for quick, multidirectional movements and injury prevention.
- **Flexibility and Range of Motion**: The training increases ankle and foot flexibility, allowing for more efficient movements and reduced injury risk.
- **Force Distribution**: Athletes learn to distribute force evenly through their feet, minimizing strain on specific joints and muscles.
- **Enhanced Endurance**: With improved technique, athletes conserve energy, enabling them to perform at peak levels for longer.
- **Speed and Agility**: Better foot mechanics and stability contribute directly to faster, more agile movements.
- **Injury Recovery**: Targeted exercises aid athletes recovering from foot injuries, restoring strength and flexibility safely.

By incorporating Spring Ankle Torque training, athletes can unlock their full potential, making this system a true game-changer in sports.

Understanding the Components of the Spring Ankle Torque Device

Heel Height: Strength in a Variety of Shank Angles

Training at different heel heights helps athletes develop strength in various body positions. Lower heel positions train strength in deeper ranges, which are important for acceleration and sharp changes in direction. Higher heel positions are better for more upright movements, like top-speed sprinting and quick adjustments. Since sports involve unpredictable movements, athletes must be prepared to handle both deep and high shin angles while staying strong under pressure.

Torque: Preventing Excess Ankle Collapse

Heel torque plays a key role in preventing the ankle from collapsing inward or outward when landing. When the foot hits the ground, heel torque helps stabilize the ankle, allowing it to absorb and redirect force properly. Without this control, the ankle might roll too far inward or outward, leading to poor balance and weaker force transfer. The way the heel torques depends on how the foot needs to handle and generate force in different situations.

Foot Angle: Managing Different Foot Strikes

In sports, foot positioning changes based on body position, playing surface, and movement goals. Athletes need to be able to absorb and redirect force no matter how their foot lands. The angled surface on this device helps train foot mechanics in a way that matches real sports movements. This improves adaptability, helping athletes make quick, controlled movements in any direction.

Spring Ankle Torque Position One:

Heel Low

Heel Drive Out

Big Toe Low

Spring Ankle Torque Position One Example: Linear Acceleration

Heel Low

A low heel position puts the athlete in a lower shin angle, similar to how the body moves during acceleration and quick direction changes. This helps strengthen the foot and ankle to handle high-impact stops and push-offs, making explosive movements easier.

Heel Drive Out

Pushing the heel outward helps stabilize the ankle and prevents it from rolling too far inward. This is especially important in acceleration, where poor foot control can cause energy loss or instability. Training this movement helps athletes absorb and redirect force more efficiently.

Big Toe Low

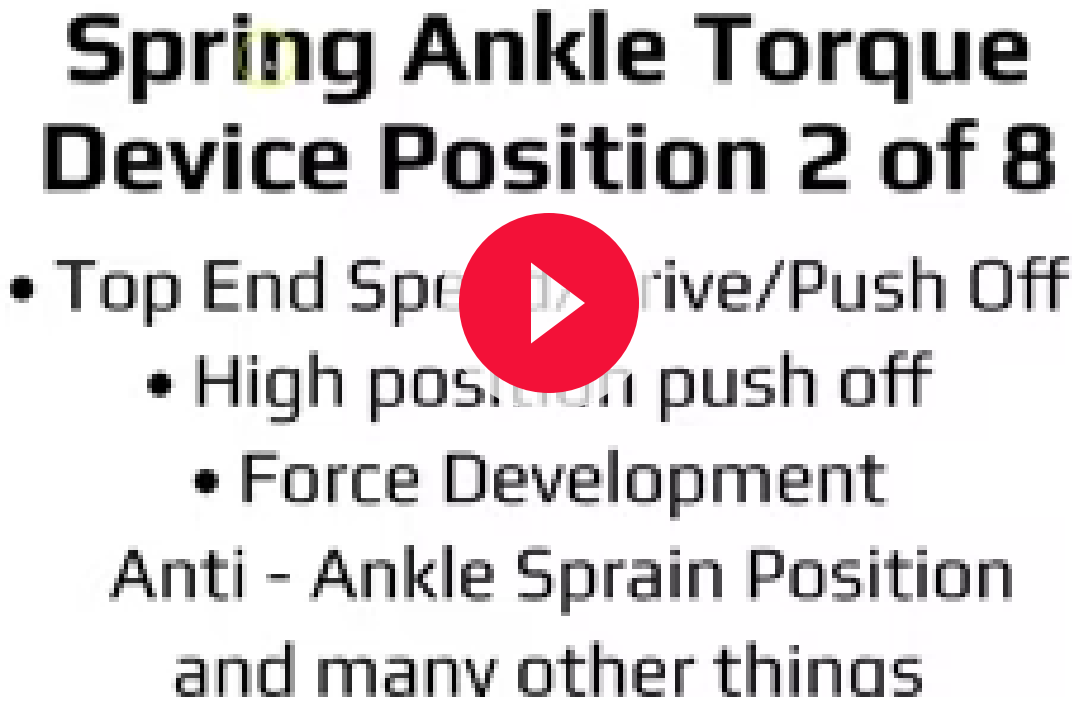
When the foot lands, the big toe is the first part to make contact with the ground and sits lower than the rest of the foot. This position helps absorb force and guide the rest of the foot into place for a stable toe off. As the foot rolls forward, the big toe plays a key role in transitioning from absorbing impact to pushing off powerfully.

Spring Ankle Torque Position Two:

Heel High

Heel Torque Out

Big Toe Low



Spring Ankle Torque Position Two Example: Max Velocity Sprinting

Heel High

When sprinting at top speed, athletes run with a more upright shin and torso posture, where the heel is higher off the ground. This position helps the foot and ankle manage the fast, powerful forces of sprinting, while also allowing for efficient energy use throughout the body.

Heel Torque Out

Turning the heel outward during foot strike helps prevent the ankle from rolling inward too much. This stability is crucial in high-speed running, as it ensures proper force absorption and redirection, maintaining efficient energy transfer and preventing movements that could slow the athlete down.

Big Toe Low

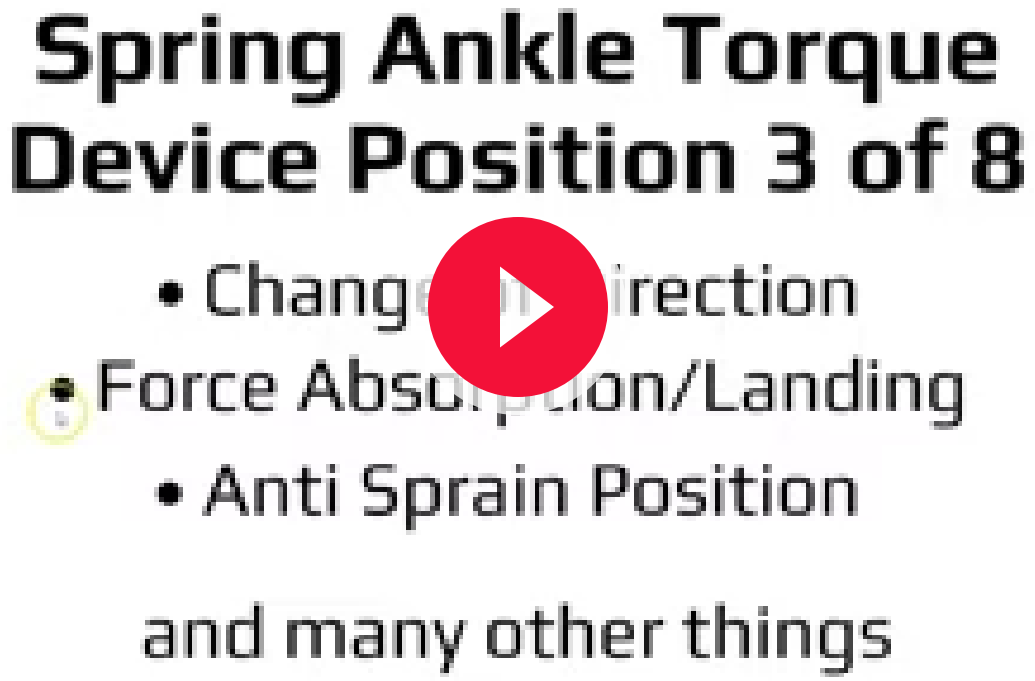
When the foot hits the ground, the big toe is the first to make contact and sits lower than the rest of the foot. This position helps absorb the impact and guides the rest of the foot into a stable position for toe off. As the foot rolls forward, the big toe is crucial in shifting from absorbing the force to pushing off with power.

Spring Ankle Torque Position Three:

Heel Low

Heel Torque In

Big Toe High



Spring Ankle Torque Position Three: Example – Linear Deceleration

Heel Low:

During deceleration, a low heel position helps the athlete absorb impact more effectively by placing the shin in deeper angles. This helps the athlete handle the high forces generated when slowing down by using the lower leg and the rest of the kinetic chain.

Heel Torque In:

When the foot hits the ground while decelerating, the inward heel torque helps stabilize the ankle and prevents the foot from rolling too far outward. This keeps the ankle aligned and helps absorb the forces from slowing down.

Big Toe High:

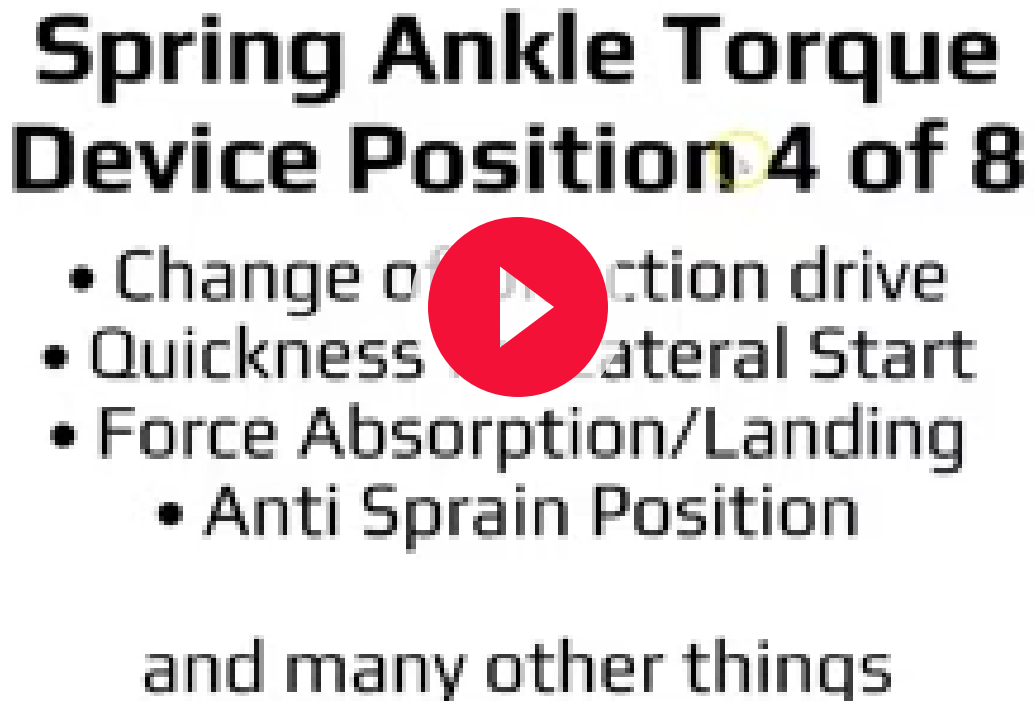
During deceleration, the heel often strikes first, with the big toe positioned high relative to the rest of the foot. As the foot makes contact, the high position of the big toe helps guide the forces smoothly through the inside of the foot. This setup allows the athlete to efficiently absorb impact and maintain balance while slowing down.

Spring Ankle Torque Position Four:

Heel High

Heel Torque In

Big Toe High



Spring Ankle Torque Position Four: Example – High Velocity Backpedaling

Heel High:

During backpedaling, the athlete maintains a high heel position to keep the torso and shank in a more upright posture. This high heel helps to prevent the body from leaning too far forward, which is essential for maintaining control and balance while moving backward. By keeping the heel elevated, the athlete can stay aligned, ensuring a smoother and more efficient backward movement.

Heel Torque In:

When the foot hits the ground during backpedaling, the heel torques inward, which helps stabilize the ankle and prevents the foot from rolling outward too much. This inward torque keeps the foot aligned and the body in control as backpedaling occurs. It also makes sure the ankle doesn’t collapse and helps transfer energy properly for the next push-off.

Big Toe High:

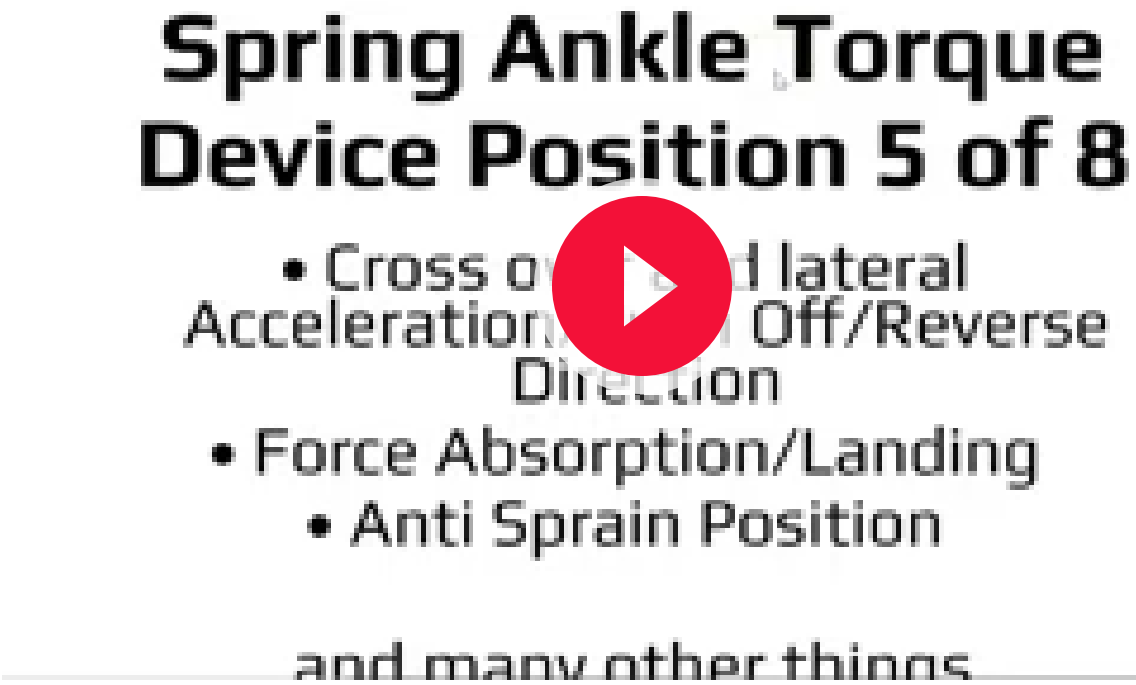
When backpedaling, the foot strikes the ground with the mid to forefoot first, unlike in linear sprinting where the big toe strikes first. As a result, the big toe is high at ground contact. This elevated position of the big toe helps absorb and redirect forces smoothly through the inner side of the foot, promoting finishing through the big toe.

Spring Ankle Torque Position Five:

Heel High

Heel Torque In

Big Toe Low



Spring Ankle Torque Position Five: Example – Right Curve Sprint (Right Foot)

Heel High:

In a right curve sprint, keeping the heel high helps the athlete stay tall and upright, which is important for maintaining speed through the curve. This position helps the body stay aligned and prevents the athlete from leaning too much, allowing them to keep their momentum while turning.

Heel Torque In:

When the foot hits the ground during the curve, the heel torques inward, helping stabilize the foot and prevent it from rolling too far in. This inward torque helps manage the forces created by the curve, making it easier for the foot to absorb and redirect the energy.

Big Toe Low:

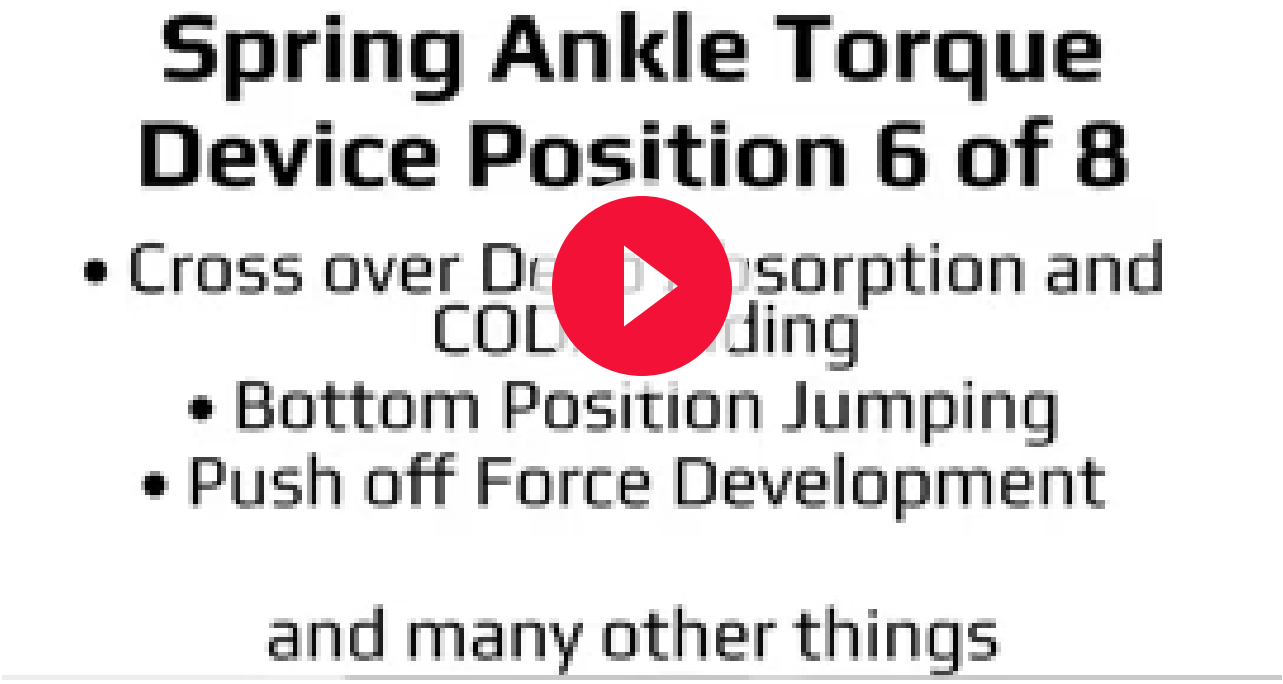
The big toe is low at foot strike, this allows the foot to adjust to the curve and direct force through the inside of the foot, providing a stable push-off. As the athlete moves through the curve, this position helps guide the foot’s path and maximizes power as they roll through the big toe.

Spring Ankle Torque Position Six:

Heel Low

Heel Torque In

Big Toe Low



Spring Ankle Torque Position Six: Example – Left to Right Change of Direction (Right Foot)

Heel Low:

When the heel is low, the foot is positioned at a deep angle, similar to how the body moves during quick stops and starts. This position helps the athlete absorb force effectively when the foot first hits the ground, while keeping the foot steady and ready to change direction quickly. It sets up the foot for a strong, efficient push-off as the athlete moves from left to right.

Heel Torque In:

Inward heel torque helps stabilize the foot and ankle, preventing it from rolling too far in. This inward torque gives the athlete a solid base to push off from, ensuring the change of direction is smooth and powerful. It keeps the foot in control as the athlete pivots, allowing for a stable and strong movement.

Big Toe Low:

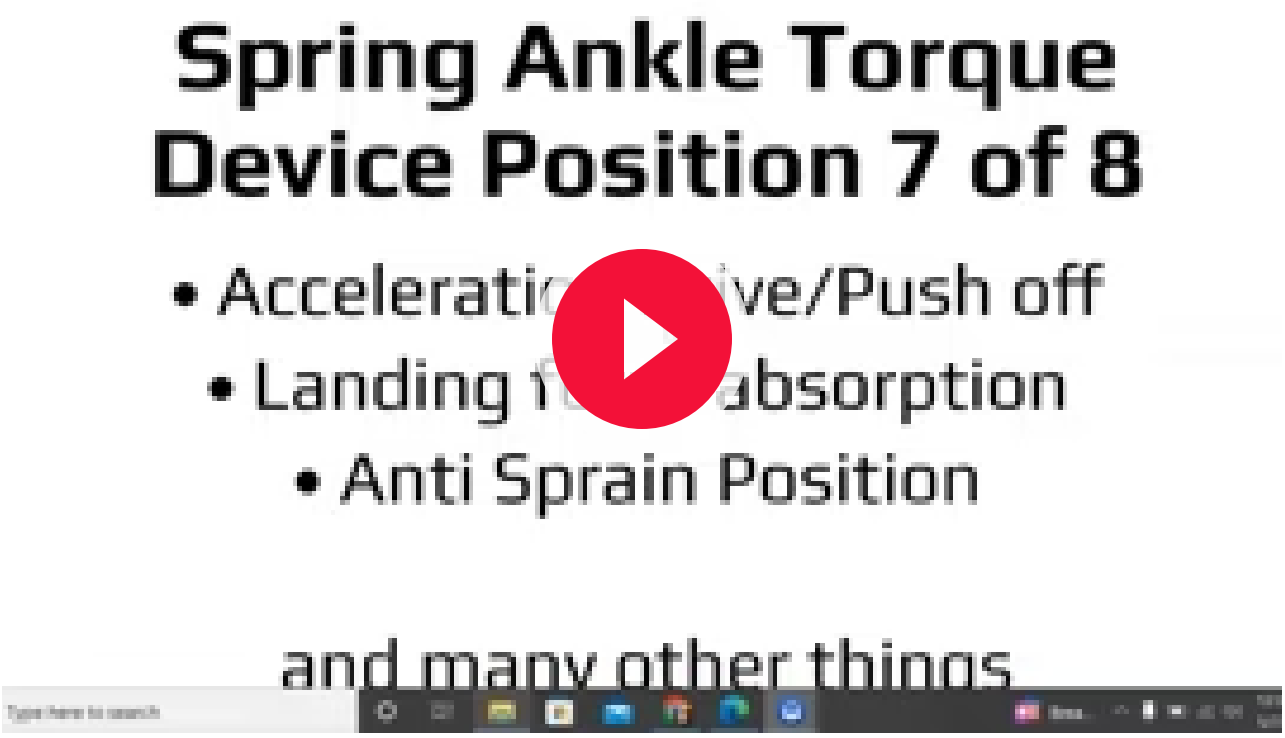
The big toe is low at foot strike, which helps absorb impact and direct force through inside of the foot. As the athlete pushes off, they roll through the big toe to maximize propulsion and help maintain momentum, making the change of direction more efficient.

Spring Ankle Torque Position Seven:

Heel High

Heel Torque Out

Big Toe High



Spring Ankle Torque Position Seven: Example – Right Curve Sprint (Left Foot)

Heel High:

During a right curve sprint with the left foot, the athlete keeps the heel high to maintain an upright posture and proper alignment of the torso and lower leg. This high heel helps the athlete stay balanced and avoid leaning too far forward, which could slow them down or mess up their form. It supports a strong, efficient position to maintain speed and control through the curve.

Heel Torque Out:

As the left foot lands during the curve sprint, the heel torques outward to stabilize the ankle and prevent it from rolling out too much. This outward torque keeps the foot aligned and helps absorb forces efficiently without losing power. It stabilizes the foot for a smooth transition, allowing the athlete to push off strongly for the next stride without losing balance.

Big Toe High:

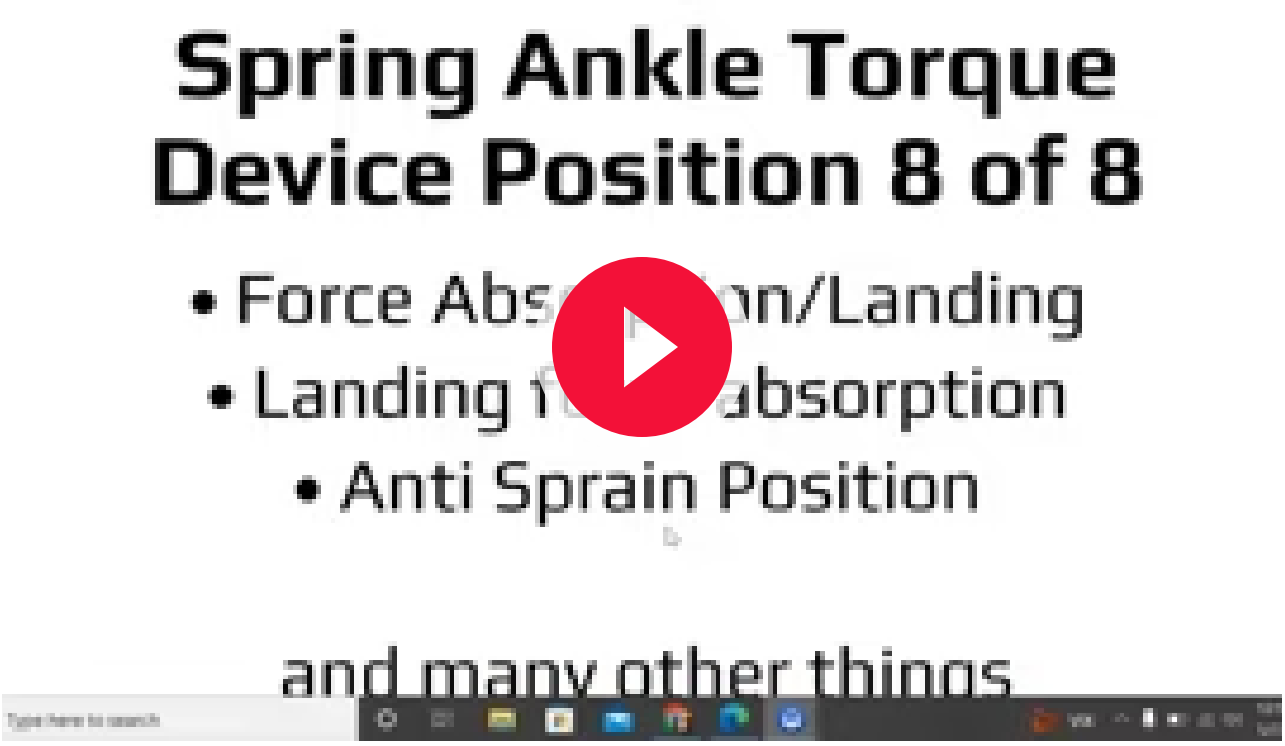
When the left foot strikes the ground during the curve sprint, the big toe is in a high position. This position allows the athlete to load the outer part of the foot efficiently. As the athlete pushes off, the elevated big toe helps release energy efficiently, providing a powerful push to keep the athlete moving fast and steady through the curve.

Spring Ankle Torque Position Eight:

Heel Low

Torque Out

Big Toe High



Spring Ankle Torque Position Eight: Example – Left to Right Change of Direction (Left Foot)

Heel Low:

During a left-to-right change of direction, the left foot strikes the ground with a low heel. This low heel places the body in a deeper angle, allowing for better absorption of forces during deceleration. It also helps with a quick shift in direction by providing the stability and control needed to pivot and accelerate in the new direction.

Torque Out:

As the left foot strikes, the heel torques outward to stabilize the foot. This outward torque prevents the foot from rolling out, ensuring that the foot stays properly aligned. This helps transfer force more efficiently to the new direction, enabling a strong and stable push-off.

Big Toe High:

When the left foot strikes the ground, the big toe is in a high position. This position allows the athlete to load the outer part of the foot efficiently. As the foot rolls through the toe, the big toe helps maximize propulsion, giving the athlete the power needed to accelerate into the new direction.