

3.0 – The Ankle Rocker

Once the foot is in place, we can move on the ankle rocker. The ankle rocker position is the midpoint of the gait cycle. This position is when the shinbone (*Tibia*) moves past 90° in the angle between the foot (*ankle/Talocrural Joint as point of axis*) and the shin. This is actually what propels your mass forward. The problem is if your ankle does not rock through in the proper manner the body is then forced to find another way to propel its mass forward. This can create a variety of compensation patterns that are both very common and incredibly inefficient. Not only is this altered movement pattern inefficient but it is likely to lead to an injury in the future. As is human nature in order to generate movement, there are a large amount of rotational forces created. Unfortunately, the ankle is not anatomically designed to absorb these torquing patterns. This creation of obscure movement places the body yet again in a scenario in which an injury is highly likely to occur.

To develop ankle rocker, the athlete the has to learn to actively pull their body in the position. It can start by simply having the athlete sit with their legs extended while trying to pull their feet back into a dorsiflexed position as far as possible. A cheat pattern that is commonly exhibited is that the athlete will hyper extend at the knee and rotate at the hip in order to make it appear as if the foot is being pulled back into position rather than the ankle actually achieving the correct range of motion that is required for the exercise.

Once the athlete is able to correctly find the position, they can move their feet back and forth while being sure to maintain constant dorsiflexed tension in the ankle. I call this exercise windshield wipers. Once again, it is important to note that sometimes the knees will move with the ankles as they move laterally, side to side. Instruct the athlete to pay close attention to the patella during this exercise. This can be their quick guide to whether they are cheating from rotating at the knee. This pattern is an indication that the athlete does not have the ability to properly segment movement between the ankle and knee complexes. The lack of segmentation in movement once again is likely to lead to an injury. This type of athlete will also exhibit a large inefficiency in lateral movement. A side note, the athlete can perform this exercise with knees slightly bent as well as knees locked.

From this exercise the athlete can transition to sitting in a chair with their feet on the ground, ankles firmly planted. The athlete will then proceed to pull their feet as high as they can into a dorsiflexed position. To make the exercise more difficult they can scoot their heels towards them so that their feet are directly underneath their center of mass. Now in a standing position they can go back to doing single leg ankle rocker squats. Again, the athlete is going to stand on the balls of their feet with their toes pulled off the ground. From this position the athlete will transition into a squat where they push the *Tibia* over the second toe. An athlete that tries to cheat the exercise will exhibit a lateral push from the hips and will look like a “Z” from the front. Many times, an athlete attempting to cheat the pattern will also bow and attempt to achieve depth by hinging and moving from their hips rather than their ankles. In order to counter this problem, instruct the athlete to stand laterally next to a door or wall while performing the squat.

This simple cue will highlight to the athlete if they are attempting to gain the range of motion by shifting laterally. If they are, they will press against the wall and the external feedback will aid to guide them away from this cheat pattern.

Using this same model of external feedback, we can address the hip hinge cheat pattern. Have the athlete simply face the end of the door with their foot approximately two inches away as they squat. If they bow, hinge or maneuver from the hips instead of the ankle they will gently strike their head on the door. These simple external cues will provide even more feedback that will help strengthen the verbal cues you are providing.

As the athlete progresses you can begin to implement ankle rocker variations into workouts. We like to implement several different approaches of the ankle rocker for athletes that are ready. Athlete can perform the ankle rocker on flat ground with a dowel for assistance. Another great variation to use is to implement the foot pads we discussed early. Have the athlete standing with a band around their knee, creating light tension by pulling the knee forward as they squat. As the athlete performs the ankle rocker, they will extend vertically matching the resistance from the band well as squeezing the dowel on the pad with their big toe, making sure to maintain a tension filled spring in the big toe. Lastly, another variation of the ankle rocker that can be added is ankle rocker step ups. The athlete performs the ankle rocker with dowel assistance just as the original, however they perform the movement from an elevated position. It is very important you coach this movement as most athletes will find a way to cheat through their hips instead of driving their knees forwards and using their ankles.

The videos we have provided in this section serve as a great guide for how to properly perform the Ankle Rocker exercise.