

Cheetah Sprint Start and Cheetah Sprint Start with modifications

The Cheetah Sprint start is based on the theory of maximizing the body's ability to use the limbs as a short lever and long lever as the speed of movement changes.

The Cheetah Sprint Start is not a function of strength levels or power generation ability, it allows a runner to generate higher initial starting velocity by creating an opportunity for maximum knee to hip extension. Persons of any sex, age and size can perform it. The learning curve is not-steep.

The regular sprint start operates on two principles: power and speed. The more power, the more explosive one should be, the better the start should be; the more speed, the quicker one moves, the better the start should be or a combination of speed and power. This requires high effort and is very energy demanding.

The Cheetah Sprint Start works on the theory of accelerating the feet. The higher initial speed of the feet the faster one can run. You can get higher foot acceleration by pushing off the ball of the foot through the ground, rather than pushing off your heels in blocks

A start sets up the rhythm of a race for the athlete, rhythm meaning stride length, foot recovery speed and the acceleration pattern. The better the acceleration pattern the higher peak speed that can be attained and sustained. Power sets up stride length while speed sets up the turn over; The Cheetah Sprint Start sets up horizontal hip acceleration by exploiting knee to hip extension from the feet providing maximum traction. And establish fast foot recovery speed. Allowing the leg to operate as two short lever arms into one long lever arm as the speed of the movement increases. Also adding speed to the movement of the lever.

The Cheetah Sprint Start also operates from the theory that the shoulder movement is amplified by the torso/spine and transferred to the hips; taking advantage of elastic energy in the pelvic girdle.

While the regular block start needs blocks, the Cheetah Sprint Start does not need blocks to be performed. It can be performed with blocks for those that are mandated to use them by the IAAF, USATF and NCAA. The Cheetah Sprint Start uses the ball of the foot to apply pressure to the ground to create traction and start a chain reaction of events. Since it is not necessary to push off against anything, blocks are not required.

The Cheetah Sprint Start can be used for any race or distance, it can be used for sprinting or hurdle races with a standing or crouching start position.

The Cheetah Sprint Start's advantage over the traditional block start is the fact that it drives the hips horizontal from initial movement, versus moving the whole body forward as a unit. It creates a balanced starting position with body weight properly distributed. It allows for the body weight to be shifted forward of the hand position. The Cheetah Sprint Start also allows for correct shin and body angles, along with eliminating the action of popping or standing up at the start.

Most of all, the Cheetah Sprint Start is more efficient than the traditional block start, being efficient is the key to being fast. The Cheetah Sprint Start allows a sprinter to obtain a more forward body position without overloading the hands and shoulders. It allows for lower body angles at the start of a race. This allows for higher initial acceleration than the traditional block start.

Setting up the Cheetah Sprint Start

Finding the ball of your foot: start by standing up and placing the left or right foot slightly in front of the other. Next, with foot flat, dorsiflex or curl the toes up. Press the ball of the foot into the ground, this should start a pivot action at the ball of the foot and raise the heel off the ground. The toe of the front foot should be anywhere from 3 to 6 inches from the starting line.

Once the ball of the foot position has been established, squat down to place the front hand on the track behind the start line (the front hand is the hand opposite the front foot), without bending over or down, keep the knee of the front leg bent with pressure on the ball of the foot, this loads the leg. It is very important to note that the lower the knee or the closer the knee is to the ground, the lower the shin angle and therefore, the better the start will be. Maintaining this low knee angle when in the set position is one of the main purposes of the cheetah sprint start.

Next, place the other hand on the same side as the front leg beside the ball of the foot, 3 to 6 inches from the start line; this allows the rear hand and foot to synchronize better on initial movement along with having the body weight balanced over the hands and feet equally. Place the rear foot 3 to 8 inches behind the heel of the front foot. Adjust this forward to allow the rear leg to support the body forward weight position. Do not take a knee; upon the "set" command, move body weight over feet and roll the foot of the front or drive leg forward. It is not necessary to raise the butt up, flat is better; it is more important to shift the weight forward. At the sound of the gun, fall and drive off the front leg, allow for knee to hip extension to take place.

If using blocks: all is the same except the placement of the rear foot which will be on the foot pad so that only the spike plate is touching the foot pad. The part of the foot past the ball of foot pad should be above the top of the block foot pad. Take a knee, but keep pressure on the ball of the foot. Roll forward to bring shoulders ahead of hands. When "set" command is called, raise butt up to flat or slightly higher than shoulder while maintaining the forward lean and keeping weight forward.

High school and college: also raise heel of front foot higher to reset low knee position.

USATF: keep foot in contact with pad.

When gun goes off: bring hand up and forward as if doing a curl or swatting a bug off your ear. The front hand drives the elbow backwards. This creates a strong glute contraction, providing for horizontal hip movement.

For the first step - do not drive the foot down but instead use the hand to add energy to the forward movement. Dropping the hand down will also bring the foot to the ground. When the foot touches, drive the elbow. Repeat this sequence for next three steps.

Do not drive knee forward. Do not lunge out of start position. Do not pick feet up.

If done correctly, hips will unfold athlete; knee to hip extension will take place; athlete will have low shin angles and will not stand up; athlete will run .2 to 1 second fast for 100m; time will improve dramatically for 200m and up.