



Movement Preparation

Movement prep is a series of exercises that prepares the body for movement; just as the term suggests. These exercises increase the heart rate and blood flow to the muscles. Movement prep exercises also raise the core temperature and “wake up” the nervous system. Last but certainly not least; these exercises act to gently stretch the muscles throughout various ranges of motion.

During movement prep, dynamic stretches are used rather than static, for greater benefit. Static stretching most certainly has its benefits, as well as an established place within a workout program. The most appropriate place however, is not *prior* to a workout... it is *following* the workout. Think about a rubber band. Does it stretch easier when it's warm or cold? Dynamic stretching prepares the body for high level of intense exercise you will be performing.

The reason for stretching a muscle is to provide elongation of the muscle. Movement prep exercises provide this elongation, and help to “train” the muscle to “remember” how to stretch and return during various ranges of motion and training intensities. This “memory” is trained through a process known as active elongation. Static stretches provide elongation of the muscle as well, however when the muscle is not properly warmed up, the risk of tears and strains during stretching are much higher. The difference between static and dynamic stretching is what we do with the muscle once it is stretched or elongated. In a static technique, the muscle is generally held in a stretched position for 10-12 seconds, and then released to a relaxed position. Dynamic stretching techniques differ in the fact that once the muscle is elongated, it is then purposely contracted. The dynamically stretched muscle is not just getting stretched and then relaxed; it is getting stretched and used throughout a range of motion. Through this process tiny stabilizing muscles located around joints in the body, are strengthened thus improving joint stability and overall joint integrity. This helps to improve performance and decrease the potential for injury.

These stabilizing muscles are similar to light switches; they can be turned on and off (stimulation). Unfortunately, most people have shut them off over years of non-use. The good thing is that just like a light switch, these muscles can be turned back on (re-stimulated). Participation in movement prep exercises can turn these muscles back on within a day or two.

Another difference between dynamic and static stretching techniques is the concept of relaxation. In a traditional static stretch we have been taught to stretch the muscle to a point of mild discomfort, and try to relax the muscle and hold it there for the given time. As previously stated, within the movement prep routine, you will be instructed to activate the stretched muscles by squeezing them. During many of the movement prep exercises, the gluteus muscles are to be activated. Many people, including athletes, do not know how to activate their gluteus muscles, thereby missing out on the tremendous amount of power and stability that these muscles provide. Movement prep will “wake up” these muscles and teach us how to ***“FIRE THE GLUTES”***.

Movement Prep consists of the following nine exercises:

- Hip Crossovers
- Scorpion Stretch
- A-Frame Calf Stretch
- Inverted Hamstring
- Inch Worms
- Forearm Lunge (World's Greatest Stretch)
- Backward lunge with a twist
- Lateral Squat Lunge
- Sumo Squat



Movement Preparation

Hip Crossover Progression

Purpose:

To build mobility and strength in your torso by disassociating the hips and the shoulders.

Starting Position:

Lie supine on the floor, arms and shoulders extended out at your sides, knees bent at 90 degrees, and heels touching the floor.

Procedure:

Twist bent legs to the right until they reach the floor, then twist back to the left. Perform 3-5 each side.

Raise feet off the floor by bending hips to 90 degrees, then perform the same maneuver as explained above. Perform 3-5 each side.

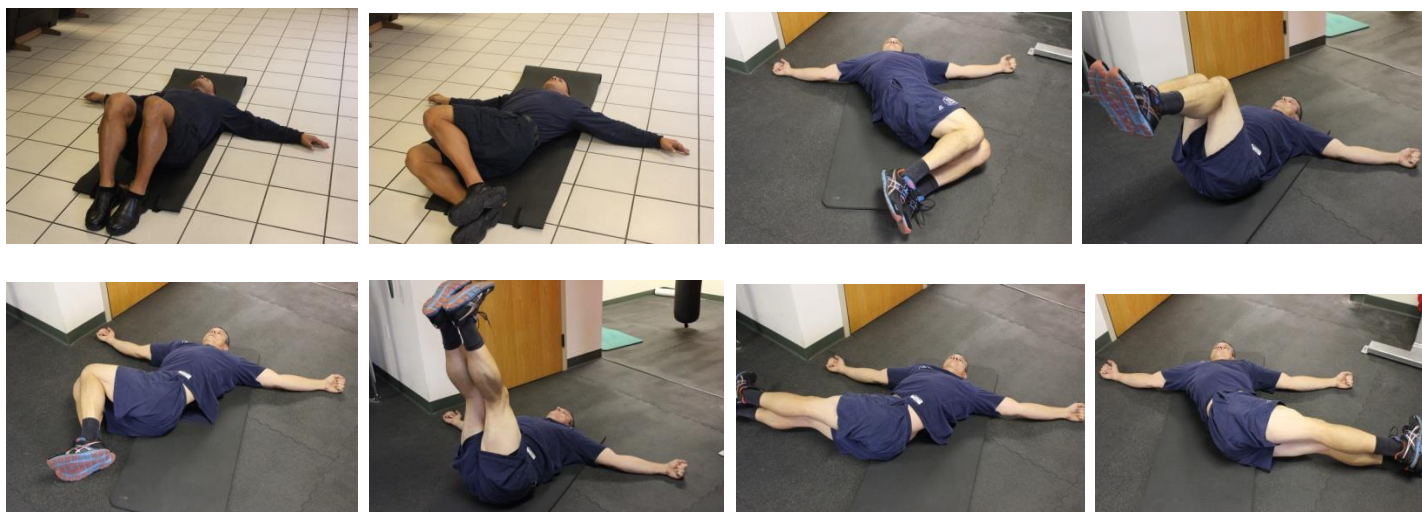
Raise feet to a fully extended leg position, perform the same maneuver 3-5 each side.

Coaching Keys:

Make sure the abs are drawn inward throughout the entire exercise, keep shoulders and hands in contact with the floor, palms up.

You Should Feel:

Stretching and contracting of your core muscles.





Movement Preparation

Scorpions

Purpose:

To lengthen and strengthen the muscles of the core; stretch of the chest, quads, hips and abs; activate the glutes.

Starting Position:

Lie prone on the floor with arms and shoulders pinned in the "Spread 'em" position.

Procedure:

Activate the left gluteus by lifting your straight left leg off the ground, then bend your left knee, and thrust your left foot in a controlled manner towards your right hand, while keeping your right hip pinned to the ground. Alternate legs.

Coaching Keys:

Be sure to "fire" (squeeze) your gluteus as you thrust your heel.

You Should Feel:

A stretch in your quads and hip flexors, along with activation of your gluteus.





Movement Preparation

A-Frame Calf Stretch

Purpose:

To increase flexibility in the often neglected area of the calves.

Starting Position:

From the push up position, place your left foot over your right heel, your weight should be on the ball of your foot.

Procedure:

Begin in a calf raise elevating to your toes, then pull your right toes towards your shin while you push your right heel down towards the ground with your left foot. Exhale as you lower your heel. Hold for a one count, raise your right heel again into a calf raise, and repeat.

Coaching Keys:

Make sure the athlete is pulling his/her toes up toward the shin at the same time they are pushing the heel to the ground. This will increase the effectiveness of the stretch, via the principle of reciprocal inhibition.

You Should Feel:

A stretch in your calf and ankle.





Movement Preparation

Inverted Hamstring Stretch

Purpose:

To Improve hamstring flexibility; balance; dynamic pillar stabilization.

Starting Position:

Begin by balancing on the right foot with perfect posture (abs tight, shoulders back and down). Arms should be extended to the sides of the body, with hands in the hitchhiker position. The thumbs should be pointing backwards, behind the athlete.

Procedure:

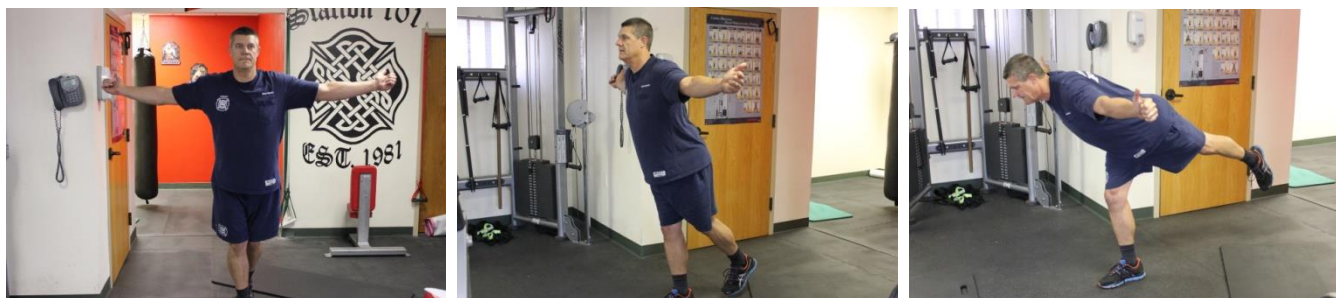
The athlete will bend forward at the waist while maintaining perfect posture. As they lean forward, the trailing leg is raised while remaining fully extended, with toes pulled towards the shin. The stretch is complete when the chest is facing the floor and the thumbs are pointing towards the ceiling. Hold this position for a one count and slowly return to the starting position. Repeat for the other leg.

Coaching Keys:

Make sure the athlete's body maintains a straight line from ankle to ear. The back and pelvis should be kept straight and flat. Someone should be able to place a broom stick snugly across the back.

You Should Feel:

A stretch in the hamstrings.





Movement Preparation

Inch Worms

Purpose:

To build stability in the shoulders and core, as well as lengthening the hamstrings, calves, and muscles of the lower back.

Starting Position:

Stand upright with arms fully extended overhead. Bend at the waist, placing hands flat on the ground. Try to maintain full extension of the legs.

Procedure:

Keeping your legs straight and the belly button drawn in, walk hands forward until reaching a pushup position. While maintaining straight legs, walk feet towards hands, as close as possible. Repeat.

Coaching Keys:

Make sure the athlete is using short “ankle steps” to walk back towards the hands. Also, make sure the hips are not swaying side to side either phase.

You Should Feel:

An overall workout.





Movement Preparation

Forearm Lunge (World's Greatest Stretch)

Purpose:

To improve flexibility in the hips, hamstrings, lower back, torso, groin, hip flexors and quads.

Starting Position:

The athlete will take a large lunge step forward with the left leg. They will place and support the weight on the right hand, even with the right foot.

Procedure:

Take the left elbow and reach down to the instep (forward leg) while keeping the back knee off the ground. Then move the left hand outside of the left foot and push the hips upward, pulling the toe upward toward the shin. Finally, step forward into the next lunge while maintaining balance and a smooth transition from one lunge to the next.

Coaching Keys:

Make sure the athlete's back knee stays off the ground, and that they exhale as the elbow is placed towards the floor. At the end, both hands must remain in contact with the floor as the hips are lifted upward. Make sure the toes are pulled toward the shin.

You Should Feel:

A stretch in the groin, hip flexor of the trailing leg, and the glute of the front leg. During the second part of the stretch, the hamstring and calf of the front leg will be stretched.





Movement Preparation

Backward Lunge with a Twist

Purpose:

To lengthen the hip flexors, quads, and core musculature.

Starting Position:

From a standing position with feet together, step back with the right leg into a lunge.

Procedure:

Reach across the body with the right hand grasping the left thigh. Pull slightly with the right arm as the torso is rotated left, turning away from the front leg. Reach behind with the left arm, palm rotated upward. Hold this position for a one count, return torso to the starting position. Drive up and back through the front leg, continuing into a backward lunge with the left leg. Repeat steps for opposite side.

Coaching Keys:

As the athlete rotates backward, the gluteus of the back leg should be fired. This creates reciprocal inhibition, allowing for greater lengthening of the hip flexors.

You Should Feel:

A stretch from the back leg through the core and lats. Additionally, a stretch throughout the hip flexors will be felt.





Movement Preparation

Lateral Squat Lunge

Purpose:

To open the muscles of the groin and hips. Also to hold pillar strength as you sit back and down.

Starting Position:

Stand with perfect posture.

Procedure:

Step out to the right into a lateral lunge, keeping the toes pointed straight ahead and feet flat on the ground. Squat by sitting back and down onto the right leg, keeping the left leg in full extension and the weight on the right leg's mid-foot to heel. Squat as low as possible, keeping the left leg straight and holding this position for a two count. Return left leg to body, while maintaining squat position. Lunge to the right again for the allotted number of reps. Repeat to the left side for the allotted number of reps.

Coaching Keys:

Make sure the athlete keeps the toes of both feet pointed straight forward throughout exercise. When returning to the starting position, the athlete should maintain a squat stance (the athlete does not return to a fully erect standing position).

You Should Feel:

A stretch in the inside of the thigh, as well as fatigue to the quads and glutes.





Movement Preparation

Sumo Squat to Stand

Purpose:

To improve flexibility in the hamstrings, groin and ankles. Also to improve both flexibility and strengthen the lower back musculature.

Starting Position:

Stand tall with perfect posture, arms extended fully overhead. Feet should be shoulder width apart with toes pointed outward slightly.

Procedure:

While keeping straight legs, bend at the waist and grasp toes of both feet. Keeping the arms straight and inside the knees, pull the hips downward until they are between the ankles. Lift the chest up, and look upward. While still squatting, raise both arms overhead, then stand up straight. Repeat for allotted number of reps.

Coaching Keys:

Make sure the athlete holds the toes until reaching the fully squatted position. The athlete should not stand until the arms are fully extended overhead.

You Should Feel:

A stretch in the groin, glutes, lower back, and ankles.

