



# Ladder Training Manual



**Drills and exercises to help you get  
the most out of your Ladder  
training program!**

## Using Your Ladder

Congratulations on your purchase of a Ladder! The Ladder is a very practical piece of athletic training equipment designed to enhance your body control and increase your foot speed. It comes with the ability to detach in the middle to increase its specific-sport versatility, which we will discuss later in this training manual.

There are several Ladder options available. The Traditional Ladder has rungs which are permanently affixed to the webbing. It features a flat bottom with a rounded top. It is important that athletes keep their heels off of the ground while using the Ladder, and the rounded top helps to remind athletes to stay on the balls of their feet. There is also a Flat style Ladder with rungs that are perfectly flat to the ground. This style generally has adjustable rungs so the coach can change their settings. We also offer a Ladder Jr., that is basically half of a Ladder. The Ladder Junior is about 15 feet long, and is perfect for most court sports since they do not need to train to the distances of field sports.

This manual will apply equally to all styles of Ladders, and all of the drills will work regardless of your particular Ladder type.

Your Ladder works on the principle of developing general athletic skills, which can then be transferred to sport-specific skills. One critical element to improving overall athletic performance is teaching the neurological system to activate more motor units. The more motor units a muscle is using, the more force it will have during contraction. A stronger muscle contraction equates to greater power output for speed and quickness, and aids in joint stability and proprioception.

The Ladder works by forcing your neurological system to send recruitment information to the muscles at a higher rate of speed recruiting more motor units. This will create quicker, faster, and more agile athletes.



## Developing a Ladder Training Program

Using a building block system of skill development is very important to success in training with the Ladder. You must work from general to advanced skill development and from full range of motion to smaller, quicker movements. If you keep in mind the principle of working from slow and controlled movements to fast, explosive movements as a teaching and learning progression, you will have greater success with the Ladder.

There are 4 basic skills used when training with the Ladder. These are Runs, Skips, Shuffles, and Jumps/Hops. When setting up your training program use the skills in this order, and then always come back and do the Runs again. Runs are generally the skill you are trying to improve the most. Begin your training program using full range of motion Runs and Skips. This will help to teach the body's muscle memory system the basic skill. Once the basic skill is learned, then the athlete can work on improving the speed at which the skill can be performed. You must always remember to learn the skills slowly, then add speed with control.

***“Once control is lost, the athlete is no longer developing a positive skill, but rather practicing for performance failure.”***

It is important to practice all 4 basic skills because athletes need the stimulus variation. Each skill aids in different motor unit recruitment and is important to the learning process.

Breaking your workout into Sets and Reps is also important to maximizing athletic development. Try not to train by whatever comes to mind, but rather have a specific goal and a program to follow. It may take several times down and back through the Ladder to get the general skill developed. Most often we use one time down as 1 rep, with 2-4 reps per set. For each skill a minimum of 2

minimum of 2 repetitions is recommended. This means that for lateral drills you would need to do 4 repetitions, because each side of the body needs to be equally trained using 2 reps. Linear drills can use only 2 reps since they work the entire body equally. You can plan your workout using as few or as many drills as you desire, but typically you will want to do at least 2 drills from each of the 4 basic skills, and one set of each drill is usually sufficient.

***“Remember to work each side of your body equally, and count each side separately as 1 repetition.”***

## **Sport-Specific Applications**

For sport-specific applications, try to match the skills simulated by the Ladder to those most frequently used in the sport. Here are some examples, but BE CREATIVE!! The Ladder is very versatile.

**Track:** Use a variety of linear drills, placing emphasis on Runs and Skips.

**Court Sports:** Emphasis should be on lateral movement and agility drills. As a creative opportunity, try separating the Ladder. Many court sports have very short bursts of intense speed. Try breaking the Ladder in half and doing quick drills through one half of the Ladder, breaking and slowing when you hit the end, then resuming the super-fast drills through the second half. This would simulate defending a competitor in basketball, for example, or returning a tennis shot.

**Football/Soccer:** Use a wide variety of drills. These sports demand linear speed as well as lateral movement and agility. You will want to use a combination of full and half-Ladder drills, but extra emphasis may want to be placed on using the half Ladder for super fast footwork drills, exploding into a sprint when the end of the Ladder is reached.



# Drill Menu

**Start slow and controlled for proper technique, then add speed with control.**

**Ankle Bounces:** Keeping the legs straight, bounce off the front part of the foot using just the snapping of the ankles. Heels never touch the ground.



**Ankle Skips:** Keeping the legs straight skip using just the snapping of the ankles.



**High Knee Runs:** Linear, one step in each box emphasizing the knee up in front, heel up under the hamstring and dorsiflex the foot.



**Lateral High Knee Runs:** Laterally, step twice in each box emphasizing the knee up in front, heel up under the hamstring and dorsiflex the foot.



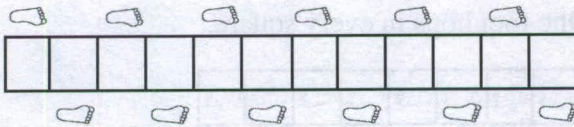
**High Knee skip:** One foot skips in each box. Make sure to get a full range of motion trying to touch the knee to the chest as you skip.



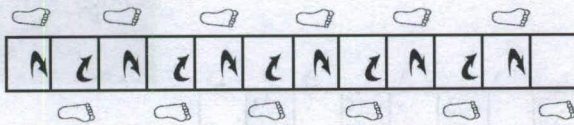
**Lateral Crossover skip:** Skip laterally with a full range of motion. Emphasize hips and knee as you crossover. As you move to your left you crossover with the right.



**Wide skip:** Keep your feet outside the ladder stepping next to each box. Skip lifting the knee up toward the shoulder. Keep good posture don't let the hips drop.



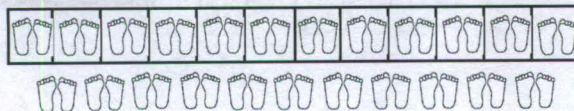
**Skip & Crossover:** Moving straight ahead skip crossing over the ladder, focus on the hips to move your feet. Do these as fast and controlled as possible. Notice the feet are reversed.



**Quick skip:** Straight ahead as fast as you can skip.

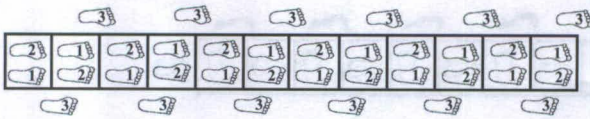


**2 in, 2 out:** Moving laterally, take two steps in each square and two out as you move down the ladder. This is a running or jumping motion.





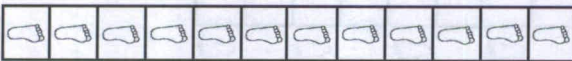
**Icky shuffle:** Cutting, 2 feet in, 1 foot out. Feel the rhythm- “in-in- out, in-in-out,” as you zig zag through the ladder. Right foot steps out only on the right side and left on the left.



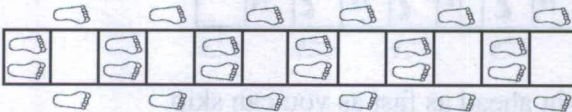
**Bunny Hops:** Two foot jumps in each square. Keep feet together as if both are connected.



**One foot Hops:** One foot hops in every square.



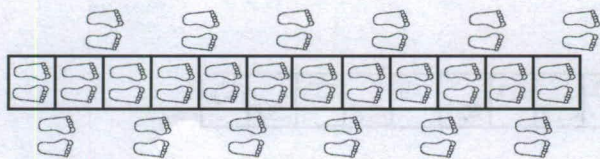
**Hop Scotch:** Two foot jump, feet split out at one box, then back together in the next box. Next try both feet out and right foot in, then both out and left foot in. Lastly go both feet out and alternate right and left feet.



**Ski Jumps:** 1 foot in, 1 foot out, jump forward and switch at the next box. You will be moving forward and your feet will be going side to side.



**Zig zags:** Jump or hop. In-Out, In-Out, zig zaging through the ladder.



**One-in Sprint:** One foot in each square as fast as you can run.



**Sprint out:** Fast through the ladder with a 5-10 yard sprint at the end.



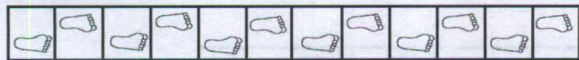
## Speed Workout

**Start each drill slow and controlled, as athletes get more accomplished they can add speed to each drill but the emphasis is still on control.**

**Ankle Bounces:** Keeping the legs straight, bounce off the front part of the foot using just the snapping of the ankles. Heels never touch the ground.



**Ankle Skips:** Keeping the legs straight skip using just the snapping of the ankles.





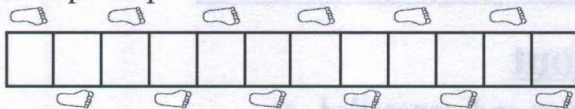
**High Knee skip:** One foot skips in each box. Make sure to get a full range of motion trying to touch the knee to the chest as you skip.



**High Knee Runs:** Linear, one step in each box emphasizing the knee up in front, heel up under the hamstring and dorsiflex the foot.



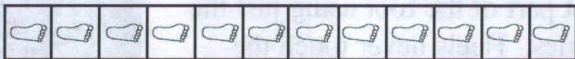
**Wide skip:** Keep your feet outside the ladder stepping next to each box. Skip lifting the knee up toward the shoulder. Keep good posture don't let the hips drop.



**Quick skip:** Straight ahead as fast as you can skip.



**One foot Hops:** One foot hops in every square.



**One-in Sprint:** One foot in each square as fast as you can run.



**Sprint out:** Fast through the ladder with a 5-10 yard sprint at the end.



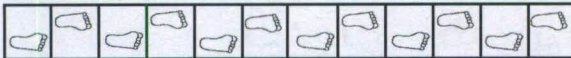
# Agility Workout

**Agility work should be done through the greatest range of motion possible and with very good control of the core. As athletes get more accomplished they can add some speed to each drill but the emphasis is still on control.**

**Ankle Bounces:** Keeping the legs straight, bounce off the front part of the foot using just the snapping of the ankles. Heels never touch the ground.



**Ankle Skips:** Keeping the legs straight skip using just the snapping of the ankles.



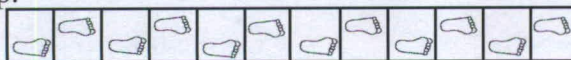
**High Knee Runs:** Linear, one step in each box emphasizing the knee up in front, heel up under the hamstring and dorsiflex the foot.



**Lateral High Knee Runs:** Laterally, step twice in each box emphasizing the knee up in front, heel up under the hamstring and dorsiflex the foot. Do not cross the feet.



**High Knee skip:** One foot skips in each box. Make sure to get a full range of motion trying to touch the knee to the chest as you skip.

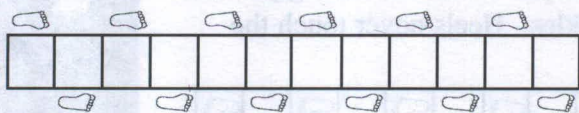




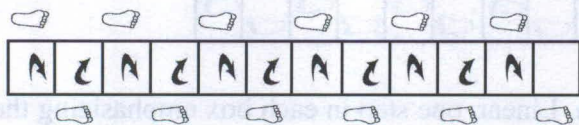
**Lat. Crossover skip:** Skip laterally with a full range of motion. Emphasize hips and knee as you crossover. As you move to your left you crossover with the right.



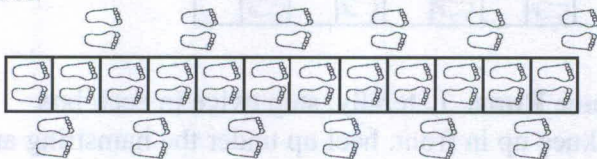
**Wide skip:** Keep your feet outside the ladder stepping next to each box. Skip lifting the knee up toward the shoulder. Keep good posture don't let the hips drop.



**Skip & Crossover:** Moving straight ahead skip crossing over the ladder, focus on the hips to move your feet. Do these as fast and controlled as possible;



**Zig zags:** Jump or hop. In-Out, In-Out, zig zaging through the ladder.



**One-in Sprint:** One foot in each square as fast as you can run.



## Quickness Workout

Do these after athletes are warm and ready to move rapidly. All of these drills are done for maximum control and speed. Start slow and increase speed with control until athletes are going as fast as they can to challenge their skills.

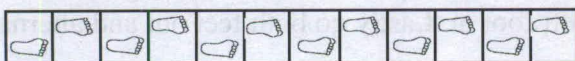
**Ankle Bounces:** Keeping the legs straight, bounce off the front part of the foot using just the snapping of the ankles. Heels never touch the ground.



**Ankle Skips:** Keeping the legs straight skip using just the snapping of the ankles.



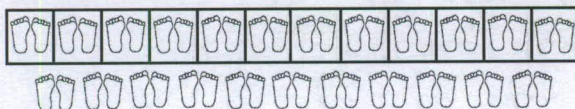
**Quick skip:** Straight ahead as fast as you can skip.



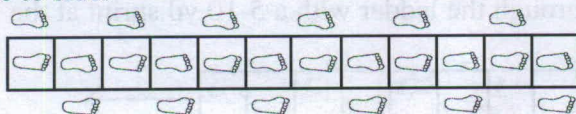
**Lat. Crossover skip:** Skip laterally as fast as possible. Emphasize extremely fast hips.



**2 in, 2 out:** Moving laterally, take two steps in each square and two out through the ladder. Do them running or jumping.

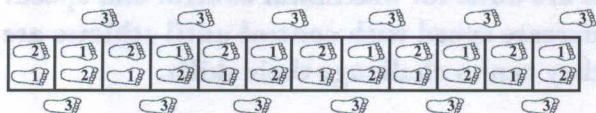


**Ski Jumps:** 1 foot in, 1 foot out, jump forward and switch at the next box. You will be moving forward and your feet will be going side to side.





**Icky shuffle:** Cutting, 2 feet in, 1 foot out. Feel the rhythm- “in-in- out, in-in-out,” as you zig zag through the ladder. Right foot steps out only on the right side and left on the left.



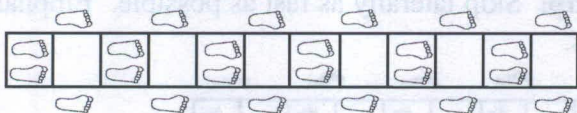
**Bunny Hops:** Two foot jumps in each square. Keep feet together as if both are connected.



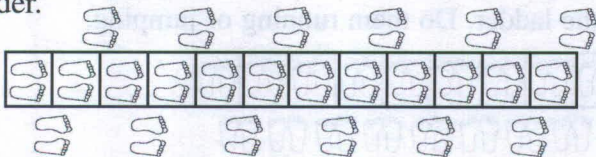
**One foot Hops:** One foot hops in every square.



**Hop Scotch:** Two foot jump, feet split out at one box, then back together in the next box. Next try both feet out and right foot in, then both out and left foot in. Lastly go both feet out and alternate right and left feet.



**Zig zags:** Jump or hop. In-Out, In-Out, zig zaging through the ladder.



**One-in Sprint:** One foot in each square as fast as you can run.



**Sprint out:** Fast through the ladder with a 5-10 yd sprint at the end.

