Snails Pace – Lightning Fast Part 2.
Speed Training for Taekwondo.
By Darryl Leech

Working on your speed in the gym can only take you so far, if you want to be a lightning fast Taekwondo-er you have to move your speed training to the dojang.

In the last article we covered what speed is and the five training prerequisites required for maximum speed – flexibility, coordination, endurance, strength and speed. Because Taekwondo requires speed through many movement patterns – spinning, jumping, thrusting – the importance of developing each of the prerequisites to a high level cannot be stressed enough. Being appropriately conditioned for your speed training will not only see you perform your techniques flawlessly (and insanely fast) but you'll avoid developing bad habits in your training and avoid injuries. Jumping straight to the 'speed' part of a speed training program will only see you fall short of your goal as your body won't have the postural stability it needs to move at high speeds. If you have followed the guides from the first article you should be ready to start on the real fun stuff but if you're not ready than go off and finish your training – this article will still be here when you're back.

Preparing the body
Speed training places a huge strain on your muscular and nervous systems so it is important to warm the body correctly. This program will be based around developing speed in your spinning kicks – please note that training variables will differ for speed in thrusting techniques (front and side kicks), remember always keep your training specific.

Flexibility: As a Taekwondo-er you need your flexibility in a standing position and the goal of your flexibility training – especially at the beginning of a session - should be to increase mobility and excite the nervous system.

3D calf stretch: Perform a standard calf stretch but raise the leg not being stretched and twist your hips in and out.

3D Hamstring Stretch: Place your foot against a solid surface around waist height (or higher), bend at the waist and twist your upper body in and out to create a stretch through the whole hamstring.

3D Quad and Hip Flexor Stretch: In a lunge position reach hands above your head and twist over your front knee. Twist hips in and out of the stretch to open up through the hips.

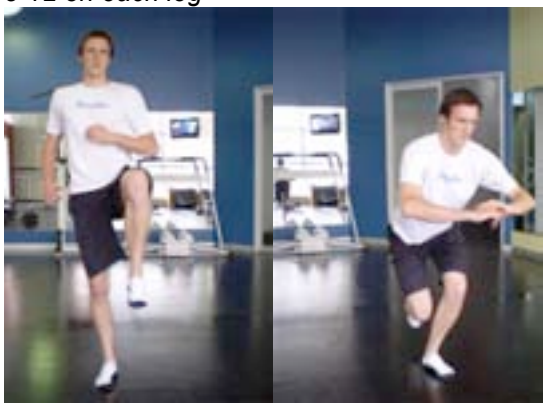
Trunk Twisting with knee lift: Stand with a stick/bar across the back of your shoulders and keep your chest up tall. Twist your upper body to one side, as you do lift the knee of the side you are twisting towards and bring the opposite elbow to that knee. Pause briefly then change direction. When you are bringing your knee to your elbow do not arch your upper back.

Perform 20sec on each exercise.

Coordination / Endurance / Strength:

Lateral Step Lunges: From standing position step to one side and land on your heel. Push off that heel and return to start position. Remember to keep your chest up.
8-12 on each leg

Lateral Jump Lunges: From standing position leap to the side and land on one foot. Push off the supporting leg to return to the start position landing on the opposite leg.
8-12 on each leg



1-1.5min rest

Standing Torque Lunge: From standing position turn and twist to one side and drop into a lunge – keep your chest up. Use your arms to create more rotation. From the lunge position use your arms and waist to twist your body in the opposite direction then push off your leading foot and land in a lunge with the opposite leg.
Note: Start slowly so you can get a feel for the movement and not lose balance.
8-12 on each leg

Jump Torque Lunge: As above but add a jump while twisting.
8-12 on each leg

2-3min rest

Speed or Speed endurance:
Do you want to reach you maximum potential speed or just be able to work at around 80% for a long time? Both speed and speed endurance training should be addressed at some point in your training but consider the overall goal you wish to achieve. Different training will require use of different energy systems. Basically – and the science of speed training goes a lot deeper than this – you will work either the aerobic (with oxygen) or anaerobic (without oxygen) energy systems. Working within the aerobic energy system means that you will be able to maintain a certain level of speed – not maximum – for a prolonged period of time, where working within the anaerobic the system will mean that you can reach maximum speed but only for a short period of time. Both energy systems can be trained to a high level but you must follow certain guides.

Pure speed training requires that you train the anaerobic system. Research shows that in order to really challenge the anaerobic system, you need to work in sets of 7-10 seconds of high intensity sprint work, which means working at full speed with no fatigue present. 2-3 minutes is the minimum time required for the anaerobic system to fully recover after each set.

High intensity speed work involves recruiting specific groups of muscle fibers and improving the efficiency in which they synchronise to help you perform the movement - running, kicking or punching etc. This process is referred to as neuromuscular conditioning and again helps us understand the importance of developing the previous prerequisites to a high level.

Now that you're warmed up it's time to begin the workout. Remember that a good warm up will leave you warm, sweaty and ready to go – not fatigued.

Kicking Workout:
Inner and outer crescents: *Basic drill to loosen the hips and let your brain know that your body will be kicking soon. Aim at a target and simply perform 20 kicks on each leg alternating between inner and outer crescents (10 of each).*
Turning Kick Knee Lifts: *Moving forward, lift your rear knee up and around the side of your body as if you were lifting it over an object about waist height, finish with your knee in front of you – don't kick, you just want to program that movement of your hips and thighs into your brain. Then perform on the opposite side. Move up and down the training hall – perform 10-15 on each leg.*

Turning Kick – Spinning Crescent: *Basic turning kick to spinning, outside crescent combo. Use the momentum and twisting motion of the turning kick to help you build speed for the crescent kick. Perform this once or twice on each side at about 70-80% max effort and take 1-1.5min rest. Next perform 2-3sets on each side at 100% effort*
1set: 5reps of the above combo with 2-3mins rest (perform this on each leg before moving to the second set)

Tornado Kicks: *Start in a right back-stance – the right leg will be the kicking leg. Step forward with your right leg to build momentum then lift your left knee and bring it around your body in an anticlockwise motion. When your left knee is in front of you jump off your right leg and perform an inside crescent kick with that foot and land on your left foot.*
Perform 2-3 sets on each side at 100% effort.
1set: 5reps with 3mins rest (perform this on each leg before moving to second set)

Turning Kick - Spinning Hook: *Perform 2-3sets on each side at 100% effort.*
1set: 5reps of the above combo with 2-3mins rest.

540: *Same as a 'Tornado Kick' but land on the kicking leg. This is a fairly tricky move – totally impractical but a fun spinning kick to play with.*
Perform 4-5sets on each side at 100% effort.
1set: 3reps with 3mins rest (perform on each leg before starting next set)

Go to www.activered.com.au to see a video demonstration of the above kicks.

Pointers:
With the above workout also consider performing more sets on your slower/weaker side to avoid creating too much of a rotational imbalance.

Remember that 100% effort means 100% effort – don't hold back!

If you are still fatigued after a set then please take more time to recover, remember that you want to be relatively fresh at the beginning of each set, starting while you are still fatigued will cause you to start working on your speed-endurance and you will not reach maximum speed. If you are worried about getting cold or stiff between sets then you can perform some basic/light movements to keep you mobile (knee lifts etc).

If you notice an increase of technical faults then this could mean that you are fatigued, which means your speed training is over for the day and it's time to work on the prerequisites. Always realise your limitations as pushing through those points when you're fatigued will only mean you

will develop bad training habits. You may have to push through fatigue if you are in the middle of a tournament but during training you want to keep your technique spot on.

Some may find training for pure speed boring because of the long rest periods and see this type of training as almost a step backwards. But always remind yourself of the long term benefits of taking the time to refine your training and build a strong foundation. Besides, if you've trained properly you should be smashed at the end of your session – if you have put maximum effort into your sets then you should want the long recovery.

Finish your workout with some basic core stabilizing and flexibility exercises.

At least 48hrs is required for full recovery from a pure speed training session.

Conclusion:

Training to develop your maximum speed will take time and patience and the above principles can be applied to develop speed in any kind of movement, so take your time, train right and move from a snail's pace to lightning fast. As always, remember the goal you wish to achieve and whether or not your training is specific for that goal.

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