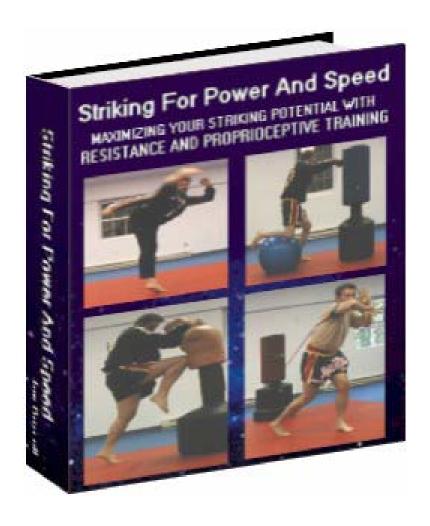
Striking For Power And Speed

Maximizing Your Striking Potential With Resistance And Proprioceptive Training



Please Note

The author of this material is not responsible in any manner whatsoever for any injury which may occur through following the instructions contained in this material.

The activities, physical or otherwise, described herein for informational purposes only, may be too strenuous or dangerous for some people and the reader(s) should consult a physician before engaging in them.

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1. Introduction

This book was written to show you how to improve striking ability with the use of proprioceptive drills and resistance training. Proprioception is your body and minds ability to realize where it is, and react accordingly. Unless trained, your body and mind are more efficient when completely rooted to the ground or balanced, due to this, critical time is wasted while striking because many times you are on one foot or not balanced at all.

Not that you will strike on one foot, but the goal is to make you balanced as earlier as possible.

I have always noticed the unavailability of books on striking improvement.

Nearly every book on combat sport striking has to do with specific techniques or combinations, and not ways to get better with athletic striking.

If you have no way to improve athletic striking, your striking ability will always be limited.

This book takes several strikes and works them with special drills so all of the body's core muscles are rehearsed while practicing. The result is faster more athletic balanced striking with more power and agility. Although rounds on the heavy bag will improve strength and power, it will do little to develop that untapped major resource in nearly all fighters, spinal muscle development. These muscles of the spine are very small, and unless challenged in multi-dimensional atmospheres, they will not become engaged. This type of practice should be used in conjunction with your bag and pad work.

With the development of these muscles, you will obtain the ability to throw your strikes as early as possible. When I say as early as possible, I mean in positions whereas before, you would not have been ready to strike, because you were not balanced. The goal then is to make you balanced in those previously unbalanced positions.

Each type of strike was selected due to its relationship to the position of the body and balance.

Early in my Martial Arts career, I was a very slow striker. Due to being slow, and wanting to get fast, I began a mission of getting my kicks as fast as I possibly could.

Years later I was no longer slow. But now I could definitely be accused of having "no power at all". I went back to the drawing board and became obsessed with why I had no power, what I needed to do to get power, and most importantly, the relationship between power and speed.

I was never satisfied with the statements you are either fast or you aren't, or you either have power or you don't. I wanted to know why some people had natural power and speed, while others didn't, irregardless of size. I proved I could obtain faster kicks, now I was out to see if I could do the same thing with power.

It was around this time that I was drawn to the style of Muay Thai. With the combination of incredible speed and power, the style of striking was just what I was looking for.

This Book's Drills

You won't see many of the drills in this book in any martial arts class. The drills in this book go way beyond the mere act of striking, and get to the very heart of athletic movement. These drills get the spinal muscles of your core

involved, those muscles that play such a huge role in athletic striking and agility.

Some of these drills will be extremely challenging, and improvement will be greatly doubted, until that moment in time when you are sparring with a partner, and for some unknown reason, you are quicker to the mark, you are striking in positions you previously could not strike from, and blocking everything coming at you.

Explosive Movements

Explosive movements and athleticism need to work in concert with each other. Many practitioners of the martial arts spend a great deal of time trying to improve explosion, but never work on efficiency of movement and athleticism. Overloading the body with explosive movements and/or strength will not help with coordinated striking. Explosion, strength, balance and speed should all be trained as one.

No matter if you take martial arts class, have an instructor, or work out in your basement or garage, successful punches, knees, kicks and elbows all have the same foundation, and the balance and athleticism of that foundation can be greatly improved.

To become a truly efficient striker, there is no substitute for drills, and consistency in training and repetition. Learning the technique is one thing, but being comfortable throwing it in competition will take the extra added practice of sparring with a partner. For this you will need a good instructor and good sparring partners.

Performing The Books Drills

The books upper body drills can be performed in the convenience of your television room. The only thing you need is a stability ball, initially you don't even need a heavy bag.

The kicking drills will require more room, but those of you who have your basement or garage rigged with a heavy bag are all set.

I have provided a chapter on devising a workout plan for the drills at the end of the book. This will help you with a starting point on setting up a program.

The books strikes all compliment each other, for example, an elbow is just a short punch, and a front kick is just a diagonal kick without the rotation.

NOTES

Proprioceptive Footwear

Throughout this book you will see drills performed with proprioceptive footwear. I use JUMPSOLES with a special plug inserted in the bottom of them to make the mere act of walking a balance challenge. They are made by JUMPUSA.com.



You can get more information on JUMPSOLES at the following page:

http://www.fightingshape.com/products.html

Right And Left Side

In this book, nearly all techniques are thrown from the right side. If throwing from a southpaw stance, just reverse all the directions. Do your drills on both sides of the body.

Pictures In The Book

A few of the pictures in the book will appear blurry. The reason for this is they were cut from video in order to show the motion as it happens at full speed.

2. What Makes Up A Great Strike?

If you are a student of the striking arts, you may have seen the following information in one form or another from several different sources. I believe this is important to go over, because the drills in this system will effect every one of these power and speed sources, all at the same time.

The majority of fighting athletes never come close to reaching their striking ability. What's worse, you may think your striking is half decent, when in reality your strikes are lacking extremely in efficiency and power.

Great strikes are made up of a number of sources, all must be used in conjunction with each other, and all compliment each other.

Although there are numerous parts which make up a strike, I would like to go over the ones I feel most important:

- 1. Balanced Athleticism
- 2. Forward Momentum Power
- 3. Speed
- 4. Strength
- 5. Rotation Power
- 6. Opposite Side Resistance

7. Staying On Plane

Balanced Athleticism

Balanced athleticism is number one. Improve it, and you are well on your way to better strikes. Not the kind of balance that prevents you from falling over, but that balance magnified by 1,000. The kind of balance that directly effects capability of advanced movements. The kind of balance that separates Michael Jordan from a host of other great basketball players.

Outstanding balance lends itself to very efficient muscle firing patterns, which compliments nearly all the other components of good strikes. What do I mean by efficient muscle firing patterns? What I mean is no unnecessary wasted movement both in body and in mind.

No wasted movement in body is easy to understand. No wasted movement in mind will allow signals to your muscles to be much clearer and quicker when the core muscles have rehearsed some very challenging unfamiliar motions and positions, and as a result, these muscles are developed.

Many people feel that they can go up to the heavy bag and get off a good punch, and as a result, they have balance. This is very damaging and misleading. True striking balance comes into play during high speed striking exchanges between competitors when openings to strike are only available instantly, and require super fast reaction and response time.

Nearly everyone can improve their balanced athleticism. Usually this has nothing to do with arm strength, leg strength, and endurance...it all falls back to balanced athleticism.

Even if an athlete has taken martial arts classes for several years, he will find the drills in this book very challenging. There is a big difference between a "martial arts class" and "martial arts training that promotes striking balance".

The ability to become a great striker can be attained, punching ability is not genetic, if you follow the drills in this book, you will enhance your striking ability.

Punches in a street fight involving inexperienced combatants will most likely be coming from an unbalanced position after the initial strike. It's been said that most street fights end up on the ground, and this is true due to several factors. One of those factors can be that both fighters have no balance left to throw a strike, so the act of holding and clinching begins.

Forward Momentum

Forward momentum is a very misunderstood component of striking. In any athletic movement that generates maximum power, the spine of your body must be moving forward.

Forward momentum can be seen in nearly any athletic movement. All power movements contain a weight shift, that moment in time when your weight transfers from one foot to the other, but what is really happening is that your spine is containing some forward movement and your feet are used as the body's vehicle.

You can see and feel this in any good punch and kick, and the following:

• Hitting a baseball

- Throwing a football
- A golf swing
- Hitting a tennis ball
- Kicking a football
- And on and on...

The more you can use balanced forward momentum with the other sources, the harder your strikes will be.

Speed

Speed is an obvious one, the faster your strikes, the more power can be generated when used in conjunction with the other sources. This is very important to understand, speed and quickness without the other sources do not make your strikes powerful.

The difference can be seen in the analogy of catching a fly off the wall. Your movement is very fast, and you catch the fly off the wall rather than smashing it into the wall. This type of strike lacks forward momentum power.

What happens here is there is a release of forward momentum power from your spine as it begins to retreat to pull your arm away from the wall. The same action can be seen when snapping a towel or using a whip.

Released forward momentum strikes can be seen in combat sports all the time. In sparring sessions punches and kicks are pulled. Many boxers throw their jab as if snapping a towel, Tommy Hearns was a perfect example. Many times such a jab is used to posture, hold an opponent at bay, and set up the opponent for a big cross in boxing. In Muay Thai, because there are so many weapons, such posturing will occur much less. If you throw a strike at an opponent which is delivered with less than full power, you have brought yourself closer to your opponent and can now be grabbed and elbowed or kneed.

Strength

The stronger you are functionally, the more you will be able to harness and control forward momentum, speed and rotation power. You notice we are talking about functional athletic strength? The amount of weight you can

bench press has very little to do with the strength of your strikes, it doesn't matter if your max is 500 lbs.

Raw unbalanced strength usually will hold your striking skills back. Think about it, why can a 130-pound professional fighter knock the stuffing out of a heavy bag? Because he has loads of functional strength that he uses in concert with his speed, balance, momentum and rotation power. But don't get me wrong, benching 500 pounds <u>is</u> a big bonus when you can use all that strength will all the other sources of a great strike.

Strength really comes into play with your forward momentum in coordination with your rotation power, the stronger you are, the more you can apply.

Rotation Power

Rotation power works in concert with forward momentum, and has to do with the fact that although your spine is moving forward in a great strike, your body does revolve around an axis, which can be thought of as the spine.

As an analogy, think about a string, one end is tied to your finger, the other end is tied to a marble or rock. Now start swinging the object in a circular motion. You'll notice that although your finger is the axis, it does contain slight back and forth movement, this is the forward momentum power, the circular movement is rotation power...they are working together.

If you try to keep your finger absolutely still as you rotate the object, the object would drop.

Certain strikes use more rotation than others, but even the simplest strike will contain a certain degree of rotation power.

Opposite Side Resistance

When you are performing any athletic action involving a hit or strike, you will strike hardest when the opposite foot of the striking side is rooted to the ground and stable, or you are holding an object from moving while you deliver your strike. This occurs naturally most of the time.

When I punch with my right hand, my left foot is rooted to the ground and offering resistance to my rotation power. If I was standing on ice and punching, my left foot would slide with the punch, therefore short circuiting my resistance and the result would be a poor strike.

This can be seen very easily if you were to jump in the air and throw a punch at a very large heavy bag. If you have thrown the punch with any real force, your body will move away from the bag, rather than your punch moving through it.

This goes against traditional wisdom for jump kicks. The fact is, you can only garner so much power when you are not on the ground. Not that a jump kick cannot be effective or isn't incredible to watch, but it cannot be as effective power wise as a kick which has a strong opposite side.

Staying On Plane

Staying on plane is most important when using a diagonal kick, so it bears mentioning. With shorter strikes, such as elbows and punches, it is very hard to get off the bodies rotational plane, but it does and can happen.

In the diagonal kick, staying on plane means that when using rotation power to it's fullest, the striking implement such a your lower shin, needs to stay on the original address plane of your body's circular arc in reference with the target. Staying on plane is simple with strikes such as punches, but the longer the striking lever gets, such as the leg, the more difficult it can become.

Staying on the address plane will also allow you to be centered and make square contact. Being centered is having your whole leg completely on line with your bodyline on impact, otherwise a straight leg. Square contact is an effect of being centered and on plane, not a cause. Don't minimize the importance of square contact, it is the difference in having truly punishing strikes.

If you are a Muay Thai practitioner, when you started out you may have been frustrated by learning to kick with a straight leg. Nothing you seemed to do helped. This is because a straight leg is an effect of being square and centered. Get to the root of the problem, get on plane and centered, and you'll straighten that leg.

This is confusing, but hang in there, we will be going over this very heavily in the kick chapter.

3. Repetition Training

If you are going to get good at any athletic movement, you are going to have to repeat that movement many times. Not only repeat it, but repeat it correctly. The drills in this book will force you to use spinal movement correctly.

Repetition training is simple, it is the performing of a specific athletic movement with good technique, done repetitively enough so the movement becomes automatic, and muscle memory can be enhanced. Repetition training lends itself to several outstanding byproducts:

- 1. Efficient muscle firing patterns when your body performs a sound technique often enough, it will find the most economical way to perform that technique. We will take this step in this book as far as possible by completely training your balance for striking with special drills.
- 2. Strength and Endurance two major factors needed for all fighters.
- 3. Familiarity the more familiar a technique is to your body and mind, the faster you can perform that technique.

Repetition training is no stranger to the martial arts. Most classes are designed on learning and teaching the body by repetitive motions. Seasoned fighters know there is nothing more important than repetition training.

I have always thought a good plan of attack when perfecting skills is to write down 5 things you want to do very well from easiest to hardest. Then work on the first 2, when improvement sets in, add the next skill.

Training in this manner will also help you set and keep goals. Goal setting has to be a big part of any improvement program.

Get use to keeping a training journal and calendar. It's the only way to train consistently. I have kept a small notebook with me throughout my whole training career, and constantly monitored and adjusted my training.

Lastly, learn to love training. That's the only way you will be able to continue a consistent improvement program of any kind.

4. Sport Cords Versus

Weight Boots

After the balance muscles of the spine have been developed with the balance drills in this book, the best way to increase power and speed is with resistance. Resistance options for striking are sport cords or weight boots.

I have a general rule while using resistance for training strikes, anytime using resistance and kicking or punching at full speed, you should use a sport cord. Anytime working on balance or increasing the intensity for a balance exercise where you kick much less than half speed, you should be using weight boots.

Only use weight boots when going less than half speed. Weight boots are much too dangerous to use while kicking at full speed. The chance of injury is too great.

Sport cords offer a steady resistance while drilling strikes. The resistance of weight boots vary, and vary in direction throughout the strike. Once a weight boot aids in forward momentum, it wants to keep going forward even if your leg is now retreating, when striking with full power, this is where a bad injury can set in, such as rolling a knee.

With a sport cord, specifically when drilling the diagonal kick, your leg will have a better chance of staying on plane because your leg will be forced to use a direct route to the target area.

Sports cords and weight boots have a great number of benefits when training martial arts kicks and strikes. Here are a few of the bonuses of resistance training:

- 1. Strength training
- 2. Overspeed training
- 3. Balance forcing

<u>Strength training</u> is obvious, resistance training will enable you to become stronger due to the added resistance while performing the kick.

Overspeed training comes into effect on the recoil from any strike on the heavybag. Even though we will not be practicing intentional recoil when learning the diagonal kick in this book, after striking the bag with a roundhouse while wearing the sports cord, your foot will be returned to it's starting position rather quickly due to the recoil of the cord. The extra

benefit of this is putting you back in very good address position as quickly as possible.

Your body will become accustomed to this quick return, and will get use to it. After a few weeks, when kicking without the cord, your body will have been ingrained with a quick return of the leg to the floor, and it will become natural and automatic with continual practice. Overspeed training is used by Olympic sprinters all the time, they can be seen running downhill, or being pulled using a tow-cord at a speed just slightly greater than they can run.

The quicker your foot can be returned to the floor, the quicker you can get another kick off. This quick return to the floor will not be at the expense of full power into the target.

<u>Balance forcing</u> requires the full cooperation from all the body's muscles, large then small. If the body and mind begin to feel added resistance, they will compensate by getting the bigger muscles into the act to get the job done.

Resistance training for kicks and punches does have its skeptics. There are those who believe that being forced to punch and kick slower will make your strikes slower, as I recommend you do with weight boots. The premise being the opposite effect of overspeed training.

I do not believe this is true. There is much more going on than just the speed of the kick. Doing less than half speed kicks with weight boots makes you stronger which accomplishes but is not limited to the following:

- 1. More dynamic flexibility
- 2. The ability to control more rotation power
- 3. The ability to control more forward momentum
- 4. Increased balance

The body being taught to kick at less than full speed by slower kicks encompasses so much more than just the kick itself, and would depend on you doing nothing but slow kicks with no resistance for very high repetitions over a long period of time.

Remember the rule, use sport cords when kicking at full speed, only use weight boots when kicking much less than half speed.

5. THE POWER

STRIKING

ADDRESS

Understand this, fights are won and lost on positioning, and positioning starts with address. Your ability to maintain good position before, during and after every strike will go hand in hand with your ability to be successful.

Being a master at the art of positioning will take a fighter with marginal skills a very long way.

When I speak of being in good position, I am speaking of you being in a very good area to deliver and defend a strike. If we take positioning one step further, you should always be in good position, and keep your opponent in bad position. A multitude of pages can be filled on positioning, but for this book we are only touching on the address position.

Position starts with address, and you should learn the best position to throw each strike from, and why you are in that position.

The goal of this address is to ready you for instantaneous striking, while at the same time protecting as many vulnerable body spots as possible from "blind spot" strikes. Blind spot strikes are strikes which you do not see, and trained fighters will be trained to be aware of almost any strike, but the opportunity does exist for not seeing a strike. In that event, you want to ready the body for complete protection so a strike does not hit a vital spot. The following picture demonstrates the address position. I use the word address as opposed to stance because it constitutes a position of the whole body, not just the feet. Address positions between fighters and styles differ greatly, and usually are dictated by the areas of the body that can be struck. This address position assumes all parts of the body can be struck.



Notice several points in the address position, from upper body to lower body:

- 1. My hands are at eye level. Many people are more specific on the placement of the hands, such as one hand slightly higher than the other. Your main goal here is hands up for protection.
- 2. My shoulders are pushed upward to protect the bundle of nerve fibers on the sides of my neck.
- 3. My chin is tucked down to make it a much harder target to hit and to protect my Adam's apple and throat. Seasoned Muay Thai fighters will exploit an untucked chin. They will throw a punch straight to your throat, your nervous system will react instantaneously by lowering your chin to protect the throat, and in the process walk the chin very nicely into the knockout punch.
- 4. My elbows are kept close to my body at all times. Your elbows and forearms are excellent weapons, always keep them close.
- 5. The toes of my front foot are facing relatively straight ahead.
- 6. The toes of my back foot are at a 45-degree angle, and I'm on the ball of the foot.
- 7. My knees are relaxed and slightly bent.

The stance length and width is dictated by one of your normal strides. Stance length and width is very important, remember, the feet are the vehicles of core body movement, if they are too wide or long, agility on the first step will greatly diminish.

A good address position is two-fold:

- 1. To allow you to strike immediately at your opponent.
- 2. To put you in a position where are you are least vulnerable to an opponents strike.

Lead Arm – closest to your opponent, responsible for protecting the left side of the head and upper body.

Back Arm – protecting a good portion of your ribs and chest and the right side of your head. Don't underestimate this arm position. This is a hugely vulnerable area. The ribs protect many internal organs, and the breastbone protects your heart. A heavy blow to this area can do mountains of damage.

Remember, no one ever actually plans to get hit, so you want to be in a position that when you do, you are protected. Suppose you could not see?

How would you present yourself to your opponent? That's exactly what will happen on a "blind spot" strike, a strike you don't see coming.

Keep Marching

One of the most important aspects of this address position is your ability to "march" in place. You should have a pattern of movement going at all times where you alternate lifting the balls of your feet slightly off the floor as if marching...right, left, right, left... Stay loose, and let the arms and body go with the marching flow.

This marching will help keep your body "live", and will also help put your feet in a good natural width position. This is classic Muay Thai movement.

With marching:

- 1. Your body is constantly ready to strike.
- 2. Your feet will naturally be ready for the initial movement we will need when starting a strike.
- 3. Don't avoid marching in your address position, this is a mistake, learn to strike from a marching address.

4. The greatest kickboxers in the world, the Thai's, march. You should too!



Your knuckles should be slightly bowed downward as in the above picture.

This will do two things:

- This will help coordinate the use of the correct punching muscles which will get the most benefit from rotation power, as opposed to any pushing motion.
- 2. In this position, you will avoid hyper extending or spraining your wrists.
- 3. Will help accentuate the downward punching motion which will begin to happen naturally with practice.

It should be noted that in a kickboxing match, your address position will constantly change depending on how close you are to your opponent. But what is presented here is a good address to learn to strike from.

6. TAE CHIENG -

THE DIAGONAL

KICK

The diagonal kick is perhaps the most dangerous and misunderstood kick in all of the martial arts. A version of the roundhouse kick, failure to block or evade this kick effectively can result in an instantaneous knockout. Another major reason to learn to keep that guard up and strike from a good address position.

What's unique about this kick is it's the roundhouse kick that gets from point A to point B faster than any other roundhouse. This is important because it contains the added benefit of sneak attack, a kick that hits before your opponent can see it coming.

If you ever get the chance to go to Thailand, and watch the greatest kickboxers in the world, you will see this kick used extensively and brilliantly. A good diagonal kick is a work or art. In Thailand, this kick is thrown so effortlessly, but with amazing speed and ferocity. It is the result of the true harnessing of rotation power and staying on plane.

Many times, because of the natural plane of the kick and the ability to throw it even at high levels at close range when perfected, this kick appears to come out of nowhere, only to result in an opponent dropping to the floor

seemingly for no apparent reason. This kick is normally thrown to the lowest rib on the side of the body, or the side of the neck.

When learning this kick, always start out as low as you need to. If flexibility is a factor, go to thigh height. Normally, we would drill this kick to the lower rib.

The diagonal kick is not thrown typical of the roundhouse kick of many martial arts styles, we will be doing several things in this kick that you may not be use to if you have been throwing a certain style of roundhouse for some time.



What is unique about this kick?

- The kicking leg follows as close as possible direct line from kicking leg to target, which allows for a punishing straight leg at impact. More on this below.
- 2. You are on the ball of the foot of the supporting leg while performing the kick, as with all Muay Thai kicks. This lends itself to an extreme athletic movement, and enables tons of forward momentum power.
 Many styles practice kicks on the sole of the supporting foot, but now

- that you know about forward momentum power, you can see where the power generation of a flat foot kick will be limited.
- 3. You strike with the lower part of the shinbone.
- 4. Advancing slightly before the kick is thrown will add more forward momentum power, and increase the angle of attack.
- 5. There is no chamber or intentional bending of the knee in this kick, you merely lift the knee up naturally from its address position.
- 6. There is no rechamber or recoil in this kick, you train to kick through the target. Many styles pull back the kicking foot after the kick has been completed. In order to effectively pull a kick away, your spine must also be moving away...at this point, forward rotation and momentum power has ceased.
- 7. The striking foot position is usually held in a normal standing position. In other words, there is no pulling back of the toes, this helps to accentuate the lower shin protrusion, see picture. Try it, look at the position of your lower shin bone as you move your foot forward, as if positioning for a roundhouse kick with the top of your foot or instep, and then move it back to a normal standing position and watch the lower shin bone poke out.

Note that the right arm swings in a downward fashion to aid in maximum rotation power and forward momentum. I can help you understand this with the following analogy, you are standing with a pair of roller blades on, and you want to propel yourself in a circle. You are standing next to a waist high fence, in a natural manner, you would grab the fence with your right hand and pull downward. You would now be moving forward and to the left.

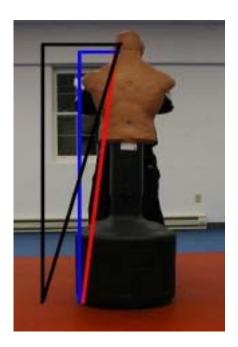
Recoiling or pulling back a kick is an important point. In my opinion, roundhouse kicks that rotate all the way through the target are the healthiest kicks on the body. There is no wear and tear on the body by pulling a kick back after it is reaching maximum power.

Thousands of kicks, being forced to stop at mid range, and then being pulled back by the core, lower back, and knee are not nearly as healthy as the whole body going with the momentum of the kick. By being on the ball of the foot there is minimal twisting or turning of the knee, merely a pivot on the ball of the foot.

Breaking Down The Diagonal Kick

Staying on the rotational plane of the body at address is what enables our leg and body to work in complete unison and generate incredible speeds in this kick. This seems as though this would happen naturally, and it does, as long as no manipulation of the leg takes place at the initiation of the kick. This is easier said than done.

Most people have practiced a roundhouse which comes from a much flatter angle, in other words, it is much more around than up and down. With the diagonal kick, you will be throwing it more up and down.



Take a look at the previous picture to see the sharpness of the angle of attack of a diagonal kick that would go to the neck of an opponent. The red line is a straight line from my foot on the other side of the heavy bag to the neck of the bag. The blue line represents the angle. The black lines show an angle typical of a round house that you may be more use to.

If you were throwing this kick to the lower or floating rib, the angle of attack would be much flatter. Many athletes have a difficult transition taking this kick to the neck level, this is most likely due to the feelings of the different level kicks not being exactly the same.

You can tell by looking at the picture that throwing the kick on the black line angle will involve manipulating the knee and foot outside of your direct straight line path to the target. This is the most common breakdown of the bent leg at impact.

In the diagonal kick, we want our leg to keep its relation to the hips at impact just as it is when we are standing, which is a straight line. When this happens, the leg has been swung following the correct plane, and the leg will straighten naturally. The result...a huge bomb!

Generally this is difficult to do because most people are use to throwing a roundhouse kick that is very leg and muscle oriented, and try to gather as large a circular arc as possible, so the knee moves outside of the plane we want to be swinging on in the diagonal kick.

By throwing a roundhouse on as large an arc as possible, the kick becomes more leg muscle oriented, and when using this kick in fairly close distances, there is not enough time for that. Such a kick is very easy to stifle with a lead leg front kick to the inner thigh or stomach.

Why The Leg Won't Straighten

Failure to keep our leg in relation to the upright plane you need to be kicking on spells disaster for full power and the straight leg effect in the diagonal kick. What usually happens in this instance is that the body gets too far ahead of the leg.

If the body gets too far ahead, to straighten your leg out, your body would have to stop and wait, this is difficult because your leg is moving too fast in such a short area to control, and our mind tells us not to stop because we are kicking for power.

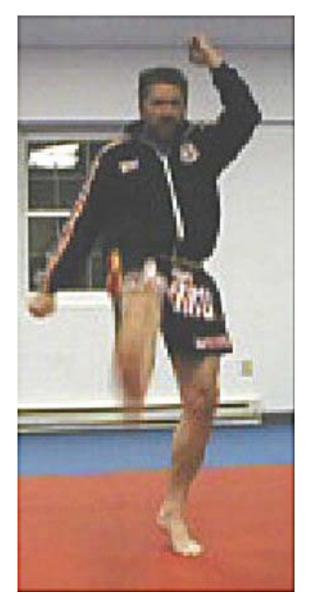
This is also a very natural motion when your body is too far ahead. Your mind can sense that you are not going to make square contact, so it does everything it can to play catch up. You may even bring your knee in closer to your body, which bends your leg even more, any way it can, the body will try to compensate. The result is kicking with an unstraightened leg.

Try it, throw a roundhouse at a heavy bag and see if your leg straightens.

Unless you are adept at the diagonal kick, you most likely cannot do it. The reason is that have taken your leg off the upright plane of your hip, knee and foot of the address position, which is okay, unless you are trying to garner as much rotation power and speed as possible. We must guard against this while throwing this style of kick.

Please understand that it is not my intention to trash any style of roundhouse kick, not at all. I am just trying to differentiate between different types of kicks with the diagonal kick. Muay Thai alone has many variations of the roundhouse, and some are more muscle oriented, but the diagonal kick is one that relies heavily on rotation power.

Try this drill, to try and get the initial feeling of what is going on in this kick, take your address position, and merely step forward onto the ball of the front foot, and do a forward leg swing like in the following picture.



Note the feeling that you have of the leg straightening. As long as you have adequate flexibility, the leg will straighten naturally. Believe it or not, this is the motion that the diagonal kick uses without the rotation power added in.

If I turned my hips over in the above picture, the result would be a fairly steep angled diagonal kick.

DRILL 1

As in the above picture, drill to get the feeling of your leg straightening. This is a very important drill if you are not use to the straight leg effect. To start out, there is no plane or turning over of the hips.

- 1. Take your address position
- 2. March in place
- 3. As your right foot taps
- 4. Step slightly forward with your left foot
- 5. Make a controlled forward leg swing with the right leg and start to get the feelings of straightening your leg, which should happen naturally. If it doesn't straighten, pretend you are playing kick ball, and about to give the ball a decent boot. Better yet, pretend you are doing a self defense kick putting your shin into the groin of an opponent, this kick is more affectionately know as the "nutcracker".

You might be saying, this is just a front kick. It is a front kick with no forward thrust of the hips, but there is no over emphasizing of lifting of the

knee. If we over emphasize that, we may lift the knee too high, and unless we are going to the head, lifting the knee too high will also take our kick out of plane for a lower kick.

You only want your knee to raise as high as necessary, which is lower than the target. The resultant hip turn, and ball of boot positioning will raise the knee higher.

Although simple, this is a very important drill, you need to ingrain the feeling of your leg staying on plane with the original address position, and not making the knee go out of whack. Your knee should be raised just high enough.

Not manipulating the knee may be very easy for some people, but if you have been throwing a roundhouse with a very accentuated knee raise for quite some time, it may prove difficult. Back to kickball, you wouldn't pull your knee straight up to kick the ball, it would only go as high as necessary.

With this next drill, now you only need to turn your hips over and pivot on the ball of the foot to get rotation power into the act. When most people do this drill, their reaction is..."this is all I have to do"?

DRILL 2

Now we will add the rotation of the hips. We will do this drill the very same as the above, only on every third kick, we will pivot on the ball of the left foot, turn the hips, and easily strike the heavy bag with the lower part of the shin, at this point the arch of the kicking foot will be parallel with the floor.

- 1. Do the following steps of the preceding drill 2 times.
- 2. On the third time, as the right foot taps on the marching address
- 3. The left foot steps slightly to the left of the heavy bag.
- 4. As you do your upward leg swing, your left foot pivots on its ball.
- 5. Your hip turns over.
- 6. You strike the heavy bag with your lower shin.
- 7. Repeat

Note in the next picture the position of the right foot. It is not parallel to the ground, this is because the hips have not fully rotated and turned over as you

can see from the hip placement. Also note the right foot position as if resting on the back of the opponent.



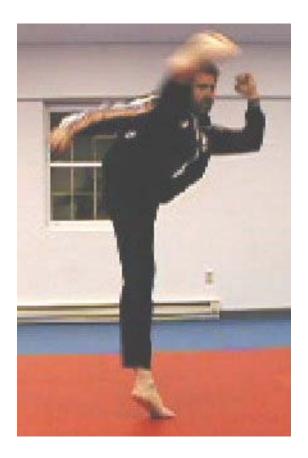
Hips not fully turning over is a point that can really be seen if looking at still pictures of 2 Muay Thai fighters in Thailand. When one throws a diagonal kick, and the other blocks with his shin, you see the toes of the kicking leg pointing skyward, the kick having been blocked before rotation has been added. The exact same motion of drill 1.



Let's look at the steps of the full motion of this kick. Because rotation power is so heavily emphasized, it is very hard to manipulate this kick once it has begun, the very reason why you may have a hard time straightening that leg. For that reason, drills 1 and 2 above are absolutely essential to throwing this kick with full power.

- 1. From your marching address position
- 2. As your right foot taps down off the march, make sure you stay on the ball of your right foot to aid in springing your right leg towards the target

- 3. Your left foot steps forward slightly to the left of your target, onto the ball of the foot to start forward momentum
- 4. You lift the right knee on a vertical path only high enough to hit the intended target
- 5. Your right leg begins to straighten as you pivot on the ball of the left foot, and rotate your hips and then shoulders
- 6. Your leg is raised upward and follows the rotational path of your hips
- 7. Just before impact, your hips will be turning over, and your arch will start to face the floor. If going to the lower rib, the top of your foot would rest along your opponents back.
- 8. You strike the target with the lowest part of the right shin
- 9. Your right arm swings in a downward motion to aid in rotation power
- 10. Your left arm stays up in the address position to help protect you
- 11. Your upper body stays as straight as possible to avoid any backward lean



In the above picture, the diagonal kick has been thrown to neck height. The left foot has stepped forward onto the ball of the foot initiating forward momentum power, and has begun its pivot to aid in hip rotation. The right foot is in good position, it is just about to go "arch parallel to the floor".

The hips are rotating fully, and the right arm has made an aggressive swing down the right side of the body.

Feelings With This Kick

After having grooved the kick, especially when going to the lower target areas, it may feel as though your body is pulling your kicking leg through the whole kick just like swinging a baseball bat one handed.

Very seasoned kickboxers may say that you need to kick as if swinging a baseball bat, because this is what they feel. Remember, they feel this after throwing an incredible number of kicks. Don't "try" to feel this right away, just drill the basics. A feeling is something YOU feel after repetition, and only you can ingrain that sensation and get those feelings from practice.

A better statement to a beginner would be, after you practice this enough, you will feel like your leg is being swung like a baseball bat by the rest of your body. When you do feel this, your body is truly working as a single unit.

Possible Misunderstandings

Some very misunderstood aspects of this kick are:

- 1. Lean
- 2. Straight leg

- 3. Ball of foot position
- 4. Striking downward

Once rotation power is added into any athletic movement, a very high ability exists for feelings to become skewed, and the thought that rotation power without forward momentum is adding more power than it really is.

When kicking, you have no immediate feedback or result. The sound of the heavy bag can be misleading, and unless in a real kickboxing match, you cannot judge your kick by the pain delivered to your opponent.

Most athletic moves with rotational and forward momentum power are extremely difficult, and immediate feedback proves so.

Because there is no immediate feedback, an athlete may think all is going well, when in all actuality it isn't. Always keep in mind that a kick is about 2 to 3 times as expensive on your cardiovascular system as a punch, so you need to make each kick count.

Lean

It has been advocated that an upward lean of the body is OK to do while kicking. This is contradictory, and causes a major problem with forward momentum and an athletic dynamic action. If you lean while a kick is going forward, your spine is retreating and that is tons of forward momentum power getting short-circuited. You don't lean with a punch, but when the striking lever gets longer, feelings can become misplaced.

Think of this, your playing kickball as a child out on the play ground, the ball is rolled into you at home plate, you start off after the ball to initiate forward momentum, just as you are about to kick the ball, you lean backwards...at this point, all forward momentum has been destroyed. The same is true for a diagonal kick. Although as your hips turn through the kick, a lean is eventually inevitable, we want to stifle that lean as long as possible for maximum power. If flexibility is an issue, only drill the kick to the lower heights, flexibility will improve.

Bear in mind that in the diagonal kick, as you rotate through the kicking zone, your upper body will now move towards the rear. This is still rotation

power moving along the same plane of the kick, but now in the opposite direction. If you were to lean too early on the diagonal kick when going to head height, you would cause your hips to turn over too quickly and get off the true angle we want to be kicking on, and possibly get blocked by a shoulder.

Straight Leg

Lets go back to our kickball example, what would happen when trying to kick the ball if you were unable to straighten your leg? The result would be a very unpowerful strike...the very opposite of your goal. In any athletic move using rotation power to its fullest, hitting a baseball, swinging an axe, hitting a golf ball, making a hockey slapshot...for maximum power, the swinging lever must be straightened, and contact must be square. Not only must it be straightened, it must be straightened naturally, any high-speed athletic movement cannot be easily manipulated.

This is very important to understand, again, there is no immediate feedback mechanism if you are practicing your kicks in this manner, and all will seem very well when it actually isn't.

Ball Of Foot

Outside of being unhealthy when practicing with extremely high repetitions for a number of years, you must get on the ball of your foot for any high explosion athletic movement to aid in maximum power. Over the years, the argument has been that you retain balance better with a flat foot.

If you were to sprint all out, and you stayed flatfooted, would your balance be better than if you were to run on the balls of your feet? Being on the balls of your feet is an extremely natural, balance yielding position when a dynamic high speed action is occurring.

If I'm stopping kicks in mid-execution, it would be better not to get on the ball of the foot because I would need to halt forward momentum power and be more concerned with balance on the recoil. In essence, my balance is needed to halt the kick, rather than to deliver it with full power.

This would be analogous to swinging a baseball bat, and stopping before mid-swing, and returning the bat to my ready position. Not too many

homeruns will result from that swing, and when kicking for self defense, or in a kickboxing match, we want a home run.

Striking downward

This is another case of something being felt by someone who does a large amount of punching and kicking, amateur or professional, and relaying it to a beginner who may try to make the feeling happen intentionally.

Seasoned Muay Thai practitioners feel as if their kicks and punches are striking downward. Having the feeling of chopping down on a diagonal kick is an effect of good momentum, rotation power, staying on the right plane, and ball of foot positioning, it's not a cause. Just like straightening the leg is not a cause.

After you have been practicing correctly for quite a while, this will be a feeling that you obtain in all strikes, not just kicks. This is not to be confused with certain roundhouse kicks in Muay Thai where you intentionally chop down on your target.

Don't force feelings, they are the result of practicing many good things for a lot of repetitions.

Drilling This Kick

When first drilling this kick, it should be practiced to the low or mid body regions, the outer thigh, or the lower ribs just above the hip. You only want to go as high as you are comfortable with, and your current level of flexibility will allow.

The above is important to understand, don't rush your flexibility. Enjoy your training, and let flexibility happen naturally. This kick is equally effective low and high.

For the remainder of the drills in this chapter. If at any time you notice your form on obtaining a straight leg begin to falter, stop, and go back to drills 1 and 2 until you get the correct feelings ingrained again.

DRILL 3

Throwing controlled kicks with proprioceptive footwear. This will enable you to develop a very efficient diagonal kick, these should only be thrown at

about 20% of max. Because the JUMPSOLES add some weight to your leg, they also act as a weight boot while throwing kicks. Only kick as high as you can comfortably, taking into account your current level of flexibility. In this drill, your kicking motion will go through the target, and you will finish facing the opposite direction from where you started, see pictures below.

- 1. From a marching address position
- 2. As the right foot taps, step forward slightly with the left foot
- 3. At a speed of about 20% of maximum, swing the leg up and go into the diagonal kick.
- 4. As the leg is straightening, the arch will be turning down following the rotation of the hips.
- 5. Turn the hips completely over, and face the opposite direction of where you started.
- 6. March and repeat.

Notice the following three kicks showing the beginning, mid point and ending of one repetition of this drill.



The way down on this kick will also mirror the way up, you will be going much more downward as opposed to around. The proprioceptive footwear is outstanding for this drill because the plugs restrict too much "around" movement. Some people may do a full spin all the way around when throwing this kick without a target, but when learning this kick I like to see a half spin so you can get the feeling of the same angle on the way down.



Above picture, drilling the diagonal kick with the JUMPSOLES with proprioceptive plugs inserted in the bottom.

<u>Drill 4</u>

Once you have a good motion going, you can finally add in some resistance training to get the kick faster and stronger.

After you have done a complete warm up, which should include 15 to 30 minutes of an aerobic activity such as jumping rope, jumping jacks, or jogging and dynamic stretches, do the following drill:

- With the use of a martial arts sport cord, attach it to your rear kicking leg, and attach the other end securely behind you to an immovable object, or use another person to hold it
- 2. Start your address march
- 3. When marching in place for several steps, as the right foot taps, step slightly forward and to the left of your target with your left foot, and onto the ball of the left foot
- 4. Spring your kicking leg off the floor with the ball of your right foot
- 5. Keep your upper body as straight as possible
- 6. Strike a heavy bag with the lower part of the shin, height depending on your flexibility, but no higher than hip level
- 7. Do a set
- 8. Repeat on the left side



This drill will help condition good form for this kick because, due to the added resistance, you are forced to execute proper form using the larger muscles of your body. The feeling of pulling the right leg through the kick with the whole body will be enhanced.

Drill 6

This last drill is a pre-hip turn strength drill which uses weight boots and kicks at much less than half speed. The purpose of this drill is to begin to groove the correct motion for a kick to the neck area. This drill should only be used when flexibility has started to improve. Kick much less than half speed for two reasons:

1. You are wearing weight boots

2. You will be striking the bag easily, if at all, with the inside of our right ankle

The kicking drill:

- 1. Start your march from your normal address position
- 2. As your left foot taps slightly to the left of the heavy bag
- 3. Get on the ball of your left foot, and start your upright kick at less than half speed
- 4. Finish the kick just before you would add in a full hip turn



7. Strong Hands

In order to train your hands correctly to throw full power 3 and 4 punch combinations, we will need to do some drills that will allow your whole body to work in coordination.

Many martial artists are not happy with their level of punching ability. Many times this can be caused by excessive static stance striking, such as only throwing punches while in a front stance.

While standing in a front stance throwing reverse punches, two major power generators have been removed, balance and forward momentum power. At this stage of the game, the biggest obstacle is balance, and I'm referring to fighting balance. Balance that starts with the micro-muscles of the spine and works outward.

By practicing punches in a front stance, we are telling the body that we do not really need its help when throwing a punch from a balance perspective. By practicing without getting your micro core muscles involved, you will never reach your punching potential.

This is why someone can throw what seems to be amazing crisp punches in a form, but when sparring, or going rounds on the pads or a heavybag, they have "no hands" and seem to be totally out of synch.

It does not have to be this way at all. In this chapter, I will be going over some drills which are almost miraculous in teaching your body balance for striking with your hands. With practice, you won't believe the transformation.

If you're a martial arts purist, you may have a problem with me telling you that you're out of balance when throwing a punch while you're in a front stance. It's not that you're out of balance in that position, and that's the problem, you are training in balance. When fighting, it will be very hard to obtain that balance perspective.

In order to train your body to it's full punching effectiveness, you need the balance sensing muscles that never get trained in static stance striking practice. As a matter of fact, these micro-muscles of the spine never get trained period unless you are doing proprioception training.

For solid striking technique, we need the same power factors that we needed in our diagonal kick. The same power factors come into play as with the kick, but we will specifically drill balance in this chapter to really bring out the best in your striking potential.



In my normal address marching position, throwing either an initial left or right hand involves the same front foot movement. I take a small step forward to start forward momentum power.

From there, rotation power starts from the ground up, no different from our diagonal kick. For example, lets take the right hand, after my front foot initiates the action, I punch straight through with my right hand. My right foot has begun to turn counter-clockwise which has started my rotation power.

Your right hip, and then your right shoulder will follow suit and get in on the act. The following picture shows the lower body after a right arm strike.



Notice the rotating of the body from the ground up. This is where flat foot punch training fails, rotation power is nearly stifled completely.

To start drilling the correct muscle firing and coordination of the body's punching muscles, we will be using several specific balancing drills, and 1 resistance cord drill.

Before starting to go into the drills, let's look at what we need to accomplish in this section.

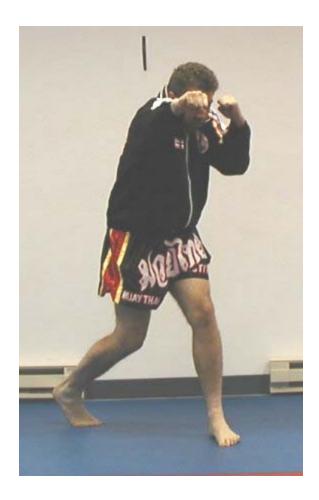
With the use of the following pictures showing a 3 punch combination, Jab-Cross-Left Hook, let's take a look at the total movement necessary for solid punches, and let's note where it can go awry.

In the following pictures, make special note of the black line on the wall placed behind me at head level. This will show just how much the core of my body is moving my three punch combination.

Poor core/spinal balance is the mother poor striking. It's just one part, but it's a big part and usually goes untrained. Most often, poor striking is not an arm/punching problem as most people feel, it is due to poor core balance which inhibits the athletic maneuvering of the spine of the body.



In the above picture, I have moved forward with the left foot, and started forward momentum power for throwing the left hand jab. My left foot has rotated counter-clockwise slightly, starting very little rotation power on this straight jab. Notice the head in relation to the black line.



Throwing the cross, my left foot is not going anywhere, it has rooted. So where does forward momentum power come into play? It comes from the movement of your spine. We can see in the picture that my head/spine has moved to the right of the black line, proof of forward momentum and rotation power.

If I showed you a side view, you would also see my head/spine has moved forward. Our spine will move in the direction of the punch. The right hand gets thrown, and we follow through so all our weight has moved towards the

left foot, our spine has moved forward, and our right foot, hip and shoulder has rotated.



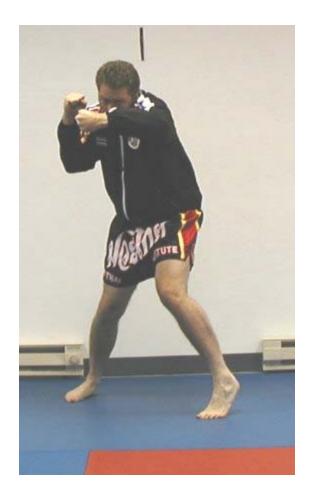
We are now in the most difficult positions for most people learning the hook to punch from. Why? Because now we are punching to the side, but we still need to apply the same rules of striking.

Our weight is fully forward on our left foot, and we need to start forward momentum power to get going. Most people who have a tough time

throwing the hook will never get the spine moving, laying on the left side on the punch, thereby not getting any power into it.

To get you to start throwing hooks correctly, very good teachers will make you accentuate a big hooking motion. What this does is get your arm momentum moving which will bring your spine along for the ride, it's a great trick. The tail wags the dog. Remember, you will want to do things with your small muscles because:

- It feels more efficient to the body
- Our bodies have been trained not to have to deal with full dynamic balance



Now I've thrown the hook, and several things have happened:

- My spine has moved fully to my right, look at the tape and how far my head has moved, nearly a foot
- The left foot and hip are now implementing rotation power
- Keep your shoulders to high to protect your neck, now that you see a diagonal kick might get you at close quarters
- My right side is now the strong opposite side

The reason for the above pictures was to show you just how much movement is occurring with my torso. All that movement is going on, but most people never think that they should train the torso. Core coordination is difficult to learn, and can take years of striking. We are going to enhance it with our drills.

When performing the following drills, always start slowly. When you become more adept, you can raise the intensity by going faster or using more power.

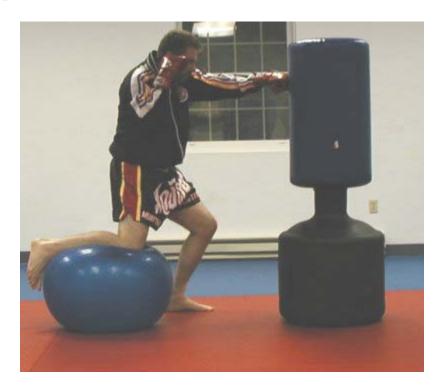
For the following drills on the stability ball, use a spotter or have some balance assisting objects close by.

Drill 1 Rear Knee On Stability Ball Jab

In this drill the spine is kept in a multi-dimensional atmosphere. This will force you to use and control the spine because it is in effect floating in space, and help to fully coordinate the core muscles for the athletic movements. At first, you may have a difficult time with any spinal movement at all, but keep at it.

- 1. Standing adjacent to a heavy bag
- 2. Position yourself in a good address position
- 3. Put most of your weight on the front foot

- 4. Place your right knee on a stability ball
- 5. Throw the left jab
- 6. Repeat



When you get good at the above drill, as with the other punching and elbowing drills in this book, the knee on the ball will be working the ball back and forth and side to side, don't rush this as it will happen naturally.

Drill 2 Rear Knee On Stability Ball Jab-Cross

Now lets use the same drill, but add in the right hand. More spinal movement will be necessary in order to throw the right cross. A heavy bag is not necessary for this drill.

- 1. Standing adjacent to a heavy bag
- 2. Position yourself in a good address position
- 3. Put most of your weight on the front foot
- 4. Place your right knee on a stability ball
- 5. Throw the left jab
- 6. Return the left hand to your guard
- 7. Throw the right cross
- 8. Repeat

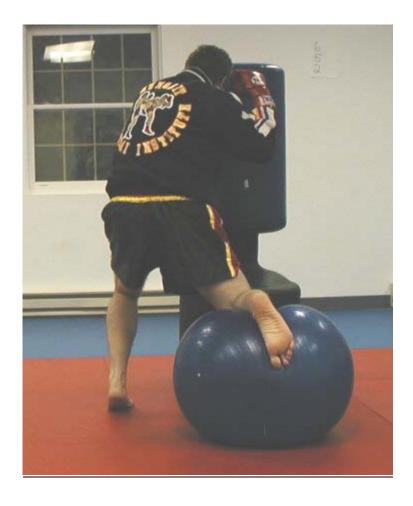


Now that we've moved on to throwing the basic one-two combination, the intensity to have your spine start regulating balance will be starting to take place. When it gets easy to throw punches in the above drill, you can raise the intensity by placing more of your weight on the ball at the beginning of each combination.

Drill 3 Three Punch Combination On The Stability Ball

This drill involves the same as above, but now we will be adding the left hook at the end of the one-two combination. Again, this is a difficult punch to throw when learning, so start slow, some major learning of the body is taking place. A heavy bag is not necessary for this drill.

- 1. Standing adjacent to a heavy bag
- 2. Position yourself in a good address position
- 3. Put most of your weight on the front foot
- 4. Place your right knee on a stability ball
- 5. Throw the left jab
- 6. Return the left hand to your guard
- 7. Throw the right cross
- 8. Return your right hand to your guard
- 9. Throw the left hook



In addition to the above drills, I am adding in the first drill from my book "Conditioning And Beyond: Amazing Strength and Balance for Combat Sports, Fitness, and Increased Athleticism", Kneeling On The Stability Ball. http://www.FightingShape.com/conditioningandbeyond.htm

Exercise 1 From "Conditioning And Beyond" – Kneeling

This is an outstanding exercise, which should be a staple of any fitness routine. I do this between other exercises, watching television, and between rounds of martial arts training. Initially, place the ball in front of an immovable object such as a wall, so the ball cannot move forward, only side-to-side. When you are able to kneel on the ball without having it move, you can gently move to one side slightly, then rebalance yourself, do this to both sides. This will take several weeks, but keep at it.

When this is mastered, move the ball to the middle of the floor, and the last hurdle of forward and back balance can be worked on. Take your time with progress, you will know when you are getting better.

Lastly, you can exercise the hips with this exercise by pressing your knees inward as if trying to pinch the ball with your knees.

- 1. Situate yourself next to something stationary, such as a chair, or use a spotter
- 2. Use a spotting device such as a chair to aid your balance
- 3. Kneel on the ball, knees shoulder width apart
- 4. Attempt to remain on the ball for several seconds, hands free
- 5. The better your core balance, the easier it will be to get and stay on the ball
- 6. After you have worked at this for some time, you can exercise from this advanced position, such as bicep curls or the military press, but only when you have mastered kneeling on the ball.



This is one of the best exercises that can be done for the overall balance of the body. In addition, when you become accomplished at it, you can do the punching drills while kneeling on the ball as opposed to front foot on the floor. With time, you can eventually do some light shadow boxing or bag work while kneeling on the ball.

Striking For Power And Speed



8. The Horizontal Elbow

It makes total sense to move on the horizontal elbow after the chapter on hands. As you will see, this elbow strike is merely a short stubby version of a punch.

As with all techniques, balance is a main key, and very underrated.

Positioning and coordination of your spine is can never be underestimated.

Elbow techniques are sometimes referred to as "in-fighting" techniques, due to this being a close range technique. While throwing the elbow, the same power sources of punches and the diagonal kick are in play.

When throwing this technique, the hand of the striking elbow should be folded downward, as in the following picture:



This will accomplish 2 things:

1. On some people, this will accentuate the sharpness of the elbow.

2. This will aid in a full rotational follow thru, if you had on a boxing glove, you wouldn't want your chest and glove to make contact.

Drill One

Let's drill this technique with the very basics:

- 1. Take your address position
- 2. Ready your left hand in your guard position to protect the left side of your head
- 3. Fold your right wrist downward
- 4. Put your elbow in the horizontal position



- 5. Start to march
- 6. Start forward momentum by taking a slight step forward with your left foot
- 7. In slow-motion, throw the right horizontal elbow across your body, face high

Use the following drill until you have satisfied the basic coordination for this technique. Don't rush it, unless the very basics are learned first, the technique is doomed from the start. After you have gone through enough

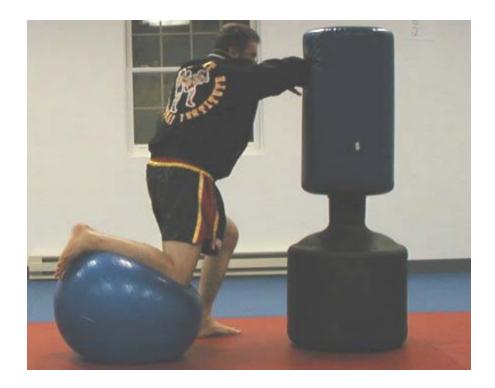
repetitive motions, you are now ready to move onto the drills to really tighten this technique, and give it "lights-out" power.

Drill Two

Right knee on stability ball, left foot on ground, heavy bag optional.

With your right knee on the ball, and your left foot on the ground as in the following picture, place most of your weight on the supporting foot on the ground. With improvement, more weight can be placed on the knee on the stability ball.

- 1. Standing adjacent to a heavy bag
- 2. Put most of your weight on the front foot
- 3. Place your right knee on a stability ball
- 4. With your left arm in a good guard position
- 5. Throw the right elbow
- 6. Repeat

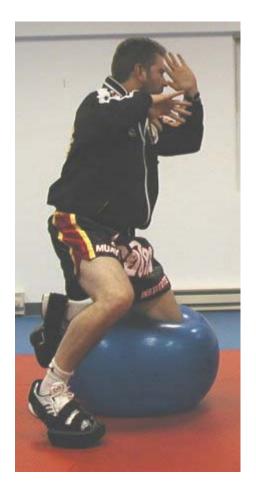


Drill Three

This is extremely challenging. This is a much harder position because your weight will be ending up on the ball after the strike. Don't rush into this particular drill, you should be very accomplished on the ball before even trying it. Use a spotter to assist.

- 1. Left knee on stability ball, right foot on ground, no heavy bag.
- 2. With your forward knee on the ball
- 3. Your back foot is on the ground as in the picture, and can be placed even with the ball if need be

- 4. Place most of your weight on the supporting foot and throw controlled easy elbows
- 5. Use a spotter to assist in balance



9. The Side Knee

It is very important to note several points about the side knee. First, this is not a technique you will see in a mixed martial arts match that often, as opposed to being thrown many times in a Muay Thai match. There are 2 reasons for this:

- 1. Most opponents who are not well versed in clinching can get pulled down for the straight knee, if you can pull someone down, it makes no sense to throw the side knee, just use the straight knee.
- 2. Getting on a single foot so close to your opponent could cause you to get put on the floor.

In a Muay Thai match, when you can't use the straight knee, it's time for the side knee.

The side knee is perhaps one of the most difficult techniques to perfect, and to throw with power. Because of this, we will be breaking this kick down into steps.

This technique is used in Muay Thai when you are unable to pull your opponents head down. This is the knee seen most commonly in Muay Thai

matches due to the outstanding neck strength of Muay Thai kickboxers, usually they are impossible to pull forward and downward as in the picture.



We must get our right side past our opponents left so we can deliver the knee with full force. If we didn't do this, there would be no way to start maximum forward momentum power, our left foot is already starting out to the left of our opponent.

We do this by hopping with our left foot to our right, and then hopping back to the left with the same foot and starting forward momentum power.

Notice the following pictures:

1. I am in the clinch



2. I hop to the right with my left foot



- 3. My right knee is readied at a right angle
- 4. My left foot starts forward momentum and hops back to the left



5. I begin the side knee and drive thru my opponent's side as my left foot gets back on the floor offering the strong left side.

Many people might think that due to the left foot hopping back to the left, that we are breaking the rule of hitting into a strong opposite side. But this isn't the case. Because my hands are holding onto my opponent, my opponent will act as my strong opposite side as I pull him into my knee until my left foot gets back on the ground.

The best way to drill this foot movement is to go through the movement without the use of the knee.

Drill 1

- 1. Hold the sides of a heavy bag
- 2. With the left foot hop to the right
- 3. With the left foot, hop back to the left
- 4. Repeat on the other side

Do this until you are really feeling comfortable with this movement. Without good foot movement and coordination, the side knee will never be thrown

correctly. When you are comfortable, you are ready for the next drill, which simply adds in the side knee at half speed.

Drill 2

- 1. Clinch a partner or the sides of a heavy bag
- 2. With the left foot hop to the right
- 3. Ready the right knee in a right angle position
- 4. With the left foot, hop back to the left
- 5. Throw the right knee into the side of the bag
- 6. Repeat with the opposite side



Don't be too frustrated if you are unable to strike with full power, we will take care of that in the coming drills.

Ok, now you are developing some coordination in the technique used to throw the side knee, now it's time to add in some resistance to work on strength and speed.

Drill 3 The Side Knee With The Sport Cord

This drill is identical to Drill 2, however, you will be attaching the sport cord just below the knee, and the other end attached to an immovable fixture.

Make sure the end attached to the immovable fixture is absolutely safe, and can withstand the pressure that you will be generating in this technique. This is very important, if you don't heed this advice, you are setting yourself up to get hurt.

I attach one end of the sport cord just below my knee, and the other end to the base of a water filled heavy bag which is extremely heavy. When safely set up, you can now repeat the steps in Drill 2. Like anything, start out slow, and gain gradual coordination.

- 1. Clinch a partner or the sides of a heavy bag
- 2. With the left foot hop to the right
- 3. Ready the right knee in a right angle position
- 4. With the left foot, hop back to the left
- 5. Throw the right knee into the side of the bag
- 6. This is one repetition



Now it's time to up the intensity, and add in working on our balance. With the use of proprioceptive footwear, you are now ready for drill 4.

Drill 4 The Side Knee With Resistance And Balance Challenge

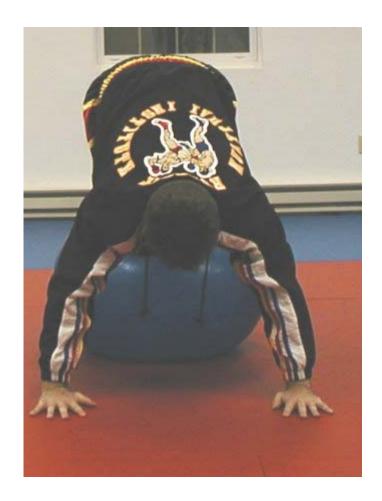
Again, the steps are the exact same as in the previous pictures, but now you will be using proprioceptive footwear, sports cord optional, as in the picture below.

- 1. Clinch a partner or the sides of a heavy bag
- 2. With the left foot hop to the right
- 3. Ready the right knee in a right angle position
- 4. With the left foot, hop back to the left
- 5. Throw the right knee into the side of the bag
- 6. This is one repetition



Drill 5 Fitness Drill

An outstanding drill to aid in the overall throwing of the side knee, is the Single Side Knee On The Stability Ball. To get use to this exercise, we will begin with Double Side Knee On The Stability Ball. With improvement, you can then move on to the single side knee.



Double Side Knee On The Stability Ball

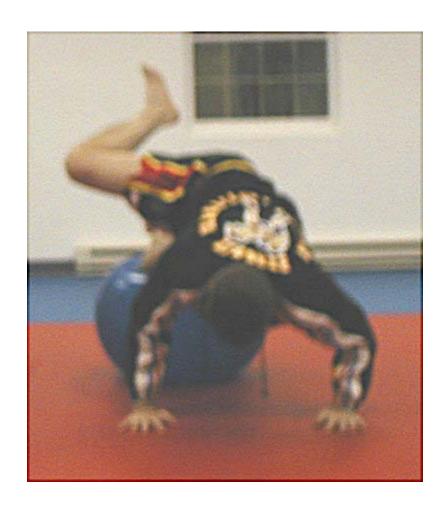
- 1. With hands on the floor and both knees on the stability ball
- 2. While retaining balance, move the ball with your knees to the right
- 3. Balance yourself with your core/midsection muscles
- 4. Move the ball back to the starting position
- 5. Repeat to the left side
- 6. This is one repetition



Side Knee On The Stability Ball

- 1. With hands on the floor and both knees on the stability ball
- 2. While retaining balance with your core/midsection muscles, move the ball with both your knees to the right
- 3. Raise your right knee off the ball slightly as if performing the side knee, then return to the left knee. When starting out, only raise the right knee very slightly until you improve

- 4. Move the ball back to the starting position with both knees atop the ball
- 5. Repeat to the left side
- 6. This is one repetition



10. The Straight Knee

The use of the straight knee is an art unto itself. Very few fighters master this technique, and with those that do, it's best giving them a very wide track. Don't let the feeling of lack of momentum fool you on this technique, when thrown correctly and hitting square to the target, it's a very painful technique.

Muay Thai kickboxers in Thailand have become very adept at preventing this technique from being thrown at them at all. Hours upon hours of clinching practice and strengthening the neck prevent this technique from being thrown much in a Muay Thai match.

The straight knee is a short stubby front kick, and that is exactly how it's thrown. Thrown straight through the target rather than upward, because of this, quite a bit of forward momentum is used. You'd be surprised just how much forward momentum you can pull off in this technique. In the next picture, it is evident that even with the planted ball of the foot, the core of my body has driven my knee quite a distance from my starting address position.

Drill One Straight Rear Knee

If you are use to throwing the snap front kick or upward knees, you will need to get acclimated to the dynamics of this technique, the best way is to start throwing the straight knee.

- 1. Take your fighting stance
- 2. Start marching
- 3. As your right foot taps the floor, step slightly forward with your left foot
- 4. Raise your knee to belt level
- 5. Use your midsection to thrust the knee forward
- 6. Don't be afraid to get on the ball of the foot of the supporting leg and turn the left foot slightly counter-clockwise when you feel comfortable, as this will add in forward momentum
- 7. As in the picture, swing both arms downward on the side of the knee that is doing the striking, as if pulling down an imaginary head
- 8. Repeat on the other side



Some teachers of Muay Thai will have you place the toes of the striking knee facing your opponent, as opposed to toes pointing downward as in the picture.

The rationale is that this will aid in an immediate front kick if the knee misses. I feel that either way, you can get off the front kick, but toes pointing down will help to protect the toes more. Either way can be used.

Drill Two Straight Knee With Sports Cord

This drill is the exact same as the above, but extra resistance is now added by using the sports cord while throwing the knee. This will place the emphasis is on the bigger core muscles of the body, and add power to the technique.

- 1. With one end of a sports cord attached to an immovable object, and the other attached just below your knee
- 2. Take your fighting stance
- 3. Start marching
- 4. As your right foot taps the floor, step slightly forward with your left foot
- 5. Raise your right knee to belt level
- 6. Use your midsection to thrust the knee forward
- 7. Don't be afraid to get on the ball of the foot of the supporting leg, as this will add in forward momentum
- 8. As in the picture, swing both arms downward on the side of the knee that is doing the striking, as if pulling down an imaginary head
- 9. Repeat



Drill Three Proprioceptive Straight Knee With Sport Cord

In our last effort to up the intensity of this drill, along with the sports cord, we now add in the proprioceptive footwear, drilling this technique in the same fashion.

- With one end of a sports cord attached to an immovable object, and the other attached just below your knee while wearing proprioceptive footwear
- 2. Take your fighting stance

- 3. Start marching
- 4. As your right foot taps the floor, step slightly forward with your left foot
- 5. Raise your right knee to belt level
- 6. Use your midsection to thrust the knee forward
- 7. Don't be afraid to get on the ball of the foot of the supporting leg, as this will add in forward momentum
- 8. As in the picture, swing both arms downward on the side of the knee that is doing the striking, as if pulling down an imaginary head
- 9. Repeat

Striking For Power And Speed



11. The Lead Leg Front Kick

We will take our feelings learned from the rear straight knee, and apply them to the lead leg front kick.

The lead leg front kick just might be the most important kick to have in your repertoire. The reason is because it is an excellent offensive kick, but more importantly, as a defensive kick, it is the great equalizer. If you are in the correct range, the lead leg front kick can take the power out of nearly any striking technique that can be thrown.

Although it doesn't have the power of the rear leg front kick, it allows you to fend off an attack from an opponent who may possess a very powerful roundhouse kick. This is done by kicking into his body or thigh, and stifling his forward momentum as he has begun his kick.

Because of this, it is important to perfect this kick. When throwing the lead leg front kick, you will usually have one of two objectives in mind, you will either:

- 1. Kick to stifle your opponents forward attack
- 2. Kick to hold your opponent at bay so you can throw another technique

Don't let the fact that you may be able to throw a lead leg front kick into a heavy bag allow you to feel that this kick is perfected. This kick should be thrown from any possible angle in the ring with blinding speed, precision and power.

This front kick is thrown with your whole body, and normally thrown as a push kick, your hips will thrust a great deal forward when throwing this technique.

After the kick is thrown with full power, and the mid-section has moved forward, we return the foot to the floor as fast as possible back to the starting address position. This is for 3 reasons:

- 1. We need to get our foot back on the ground to avoid getting it grabbed
- 2. We need to get in back in the address position so we can get off another kick
- 3. The mistake of placing the foot too far forward must be avoided at all costs. If you front kick with the lead leg, and then place the leg further than it was at address, for a split second all your weight will be on it, which will make it a great target to get kicked. Also, if you leave the

leg too far forward with your weight on it, that will prohibit any real strong technique other than a rear leg kick.

Even though the foot is returned to the ground after the kick, it is far from a snap front kick. This kick is just the opposite of a snap front kick, which snaps out and chambers or pulls back even before forward momentum has been harnessed.

The snap front kick is lacking in forward momentum power, and must be very precise to do any real damage, such as striking right on the button of the chin, nose or in an eye.

If the front push kick misses, you will still have enough forward momentum power to give your opponent something to think about.

There are no hard and fast rules on what part of the foot will strike your opponent, just whatever works. You will strike with:

- The ball of your foot, this is most common
- The whole sole of your foot, when your opponent is close to you
- The heel of your foot

Of the necessary power sources for this technique, there will not be much rotation power because this is a straight-ahead technique. But, there is some. Whatever foot is the supporting foot can pivot at a 45-degree angle if need by, depending on how far you reach with this kick. With a lead leg front kick, the rear foot is already in a pivot due to our good address position.



This kick is drilled with repetition, and we get strength and power with this kick by drilling with the sports cord.

Taking the feelings we have ingrained from the straight knee, it's time to start to develop one of the most important striking techniques in all of fighting. Not a whole lot of flash, but if I had only one kick I could use, this would be the one due to its defensive capability.

Drill One Lead Leg Front Kick

The first drill is merely throwing this kick. Don't lock your knee when throwing this kick into mid air, just let the big muscles do the work.

- 1. Take your fighting stance
- 2. Start marching
- 3. Performing at half speed raise your front knee while lifting the foot, and thrust the foot forward
- 4. Without extending your leg, use your midsection to thrust the foot forward while striking a heavy bag with the ball of your foot
- 5. Don't be afraid to get on the ball of the foot of the rear leg, as this will add in forward momentum and rotation power
- 6. Repeat



When you are use to the kick, now it's time to up the intensity. Throw the kick while using the sport cord.

Drill Two Lead Leg Front Kick With Cord

Now let's follow the same steps in Drill One, but this time, we will be securing the sport cord to our lead leg ankle, and taking care to secure the other end to the immovable object.

Repeat the same steps in Drill One, taking care to start out slow, and speed up only when coordination and strength is starting to improve.

- With sport cord secured, one end to your ankle, the other to an immovable object
- 2. Take your fighting stance
- 3. Start marching
- 4. Tap the ball of the foot of the kicking leg one or two times, doing so will put you in a defensive posture and move the left foot closer to your body as in the picture.
- 5. Performing at half speed raise your front knee while lifting the foot, and thrust the foot forward
- 6. Without extending your leg, use your midsection to thrust the foot forward while striking a heavy bag with the ball of your foot
- 7. Don't be afraid to get on the ball of the foot of the rear leg, as this will add in forward momentum and rotation power
- 8. Repeat

Striking For Power And Speed





Drill Three Proprioceptive Lead Leg Front Kick With Cord

This drill is performed with both the cord and the proprioceptive footwear.

- 1. With sport cord secured, and wearing proprioceptive footwear
- 2. Take your fighting stance
- 3. Start marching
- 4. Tap the ball of the foot on the kicking leg one or two times
- 5. Performing at half speed raise your front knee while lifting the foot, and thrust the foot forward

- 6. Without extending your leg, use your midsection to thrust the foot forward while striking a heavy bag with the ball of your foot
- 7. Don't be afraid to get on the ball of the foot of the rear leg, as this will add in forward momentum and rotation power
- 8. Repeat



A Final Word On The Lead Leg Front Kick

As stated earlier, this kick is the great equalizer. If you are a serious kickboxer, your goal should be able to throw this with speed and power from any position in the ring. It will save your hide.

An outstanding lead leg front kick will enable you to beat opponents superior to yourself. It can help frustrate, stifle attacks, start attacks and deliver punishment. **Don't let anyone throw it better than you!**

12. Time Tested Proven Muay Thai Work Out Formula

The following is the workout formula that has been used for professional Muay Thai practitioners for years and years. The reason is that it works.

Once you have improved your skills with the above drills, you can use them while doing a Muay Thai workout.

1. Warm Up

Using any cardiovascular exercise, warm up gradually for about 20-30 minutes. That kickboxers use either running or jumping rope to do their warm up, but you don't have to stop at those activities. You can bike or do jumping jacks, the goal is to start out slow, and bust a sweat so the whole body is warmed up.

2. Dynamic Stretches and Movements

After the warm up, grab some water, and it's time to do some dynamic stretches, leg swings and movements. It's very important not to skip this part of your workout, as kickboxing is a very dynamic sport which will use every muscle in your body. You need to get all the muscles ready to go.

Neck Rolls

Slowly rotate your neck 5 - 10 times in a clockwise direction, then a counter-clockwise direction.

Arm Circles

Rotate your arms in a clockwise direction, then counter-clockwise for 10 – 15 rotations.

Trunk Rotations

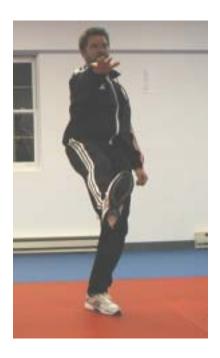
With hands on hips, circle clockwise and counter-clockwise 10 to 15 times.

Leg Swings

In these movements, your legs will be lead by the bigger muscles of your body, and not thrown to the maximum. Start out slow, and do between 15 and 30 for each leg swing. These should not hurt.

While doing the side leg swings, you can keep your body comfortably upright. Don't get use to using an excessive lean.

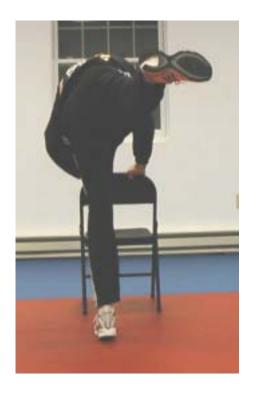
Front Leg Swings



Side Leg Swings



Back Leg Swings



3. Shadow Boxing

Shadow boxing is done in 2 to 3 minute rounds, with a minute rest in between. Normally 2 to 3 rounds are done. The object is not to go full blast, but rather to get all the muscles and the techniques going.

For the first round, use only the punching and elbow techniques. After the first round, you can add in the techniques of the lower body.

4. Drills

Now it's on to performing drills of whatever you happen to be working on. What drills? This book brought you through a number of drills, and you can easily think of some of your own. When beginning, start out your drills in low repetitions, in the ballpark of 3 sets of 10 repetitions. Seasoned kickboxers do their drills in sets of 50 repetitions, if this isn't you "yet", don't overdo it.

It makes no sense to overdo, and get yourself so sore that you can't train for several days or even works. Take your time. Thing in terms of the big picture.

5. Bag or Pad Work

Now it's time to put it all together in rounds of hitting the bag or the pads as if fighting. Using 2 to 3 minute rounds(depending on your skill level) with 1 minute rest in between, do 2 to 5 rounds on the heavy bag as if fighting.

With everything, start slow... take a round to go 60% before going up to 85%.

6. Exercise

Now to add in sit-ups, push-ups and any other number of conditioning exercises. When starting out, you will be quite tuckered out at this point, you may want to skip this part until you get your feet under you.

For my book containing a full variety of exercises, both weighted and bodyweight, go to:

http://www.fightingshape.com/conditioningandbeyond.htm

6. Cool-Down Stretch

Finally, it's time to relax into some passive stretching. These stretches should not be painful, or overdone. Keep two points in mind, relax and breathe.

13. Sample Programs

All the strikes in this book have a direct correlation to each other, and to the balance of the body. This was done intentionally, so you do not have to practice all the drills at the same time.

For example, when drilling the lead leg front kick, you are also drilling the initial motion for the diagonal kick, and the straight knee. Likewise, the rear elbow on the stability ball is the same in relation to the right cross on the stability ball.

Drilling the elbow is great for cutting out all extraneous motions for the cross.

The reason for doing this is because time could be a factor in your training, like it is with nearly everyone with the exception of professional fighters.

We don't have all day to train, so the drills in this book should be used in conjunction with your current training.

You can use the following sample programs as a guide to what your training routines should look like. When a particular drill starts to become less challenging, you will raise the intensity and make it more challenging. For

example, in the beginner program, when the straight knee becomes easier, add in the sports cord. When that becomes easier, add in the proprioceptive footwear.

The numbers below are only to be used as a guide. If your form begins to falter before you hit the desired repetitions, stop. With practice, you will get stronger and more repetitions before your form fades.

Beginner

<u>Technique</u>	Repetitions
Left Jab/Rear Leg On Ball	15
Right Cross/Rear Leg On Ball	15
1-2 Combination/Rear Leg On Ball	15
Straight Right Knee	15
Straight Left Knee	15
Lead Leg Front Kick/Both Sides	10

Intermediate

<u>Technique</u>	Repetitions
Left Jab/Rear Leg On Ball	15
Right Jab/Rear Leg On Ball	15
1-2 Combination/Rear Leg On Ball	15
Right Side Knee	15
Left Side Knee	15
Lead Leg Front Kick With Sports Cord	20
Diagonal Kick Drill 2	20

Advanced

1-2 Punch Combination/ Rear Knee On Ball	30
Left Hook/Rear Knee On Ball	15
Right Hook/ Rear Knee On Ball	15
Rear Elbow On Ball/Right and Left	15
Front Kick With Sports Cord Both Legs	30
Diagonal Kick With Sports Cord	15

Muay Thai Competitive

Shadow Box On Stability Ball	3-2 minute rounds		
Jab-Cross-Hook Combination/Back Knee On Ball	30		
Right Rear Elbow/Back Knee On Ball	30		
Left Rear Elbow/Back Knee On Ball	30		
Straight Knee With Cord And/Or JUMPSOLES And Plu	igs 20		
Side Knee Both Sides With Cord And/Or JUMPSOLES	And Plugs 30		
Front Kick Both Sides With Cord And/Or JUMPSOLES	And Plugs 30		
Diagonal Kick/Both Legs With Cord And/Or JUMPSOLES And Plugs 30			