



RDA MANUAL

Basic Terms and Techniques

Written by The Rope Dart Academy

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This manual was written and stands as a physical testament that language, communication and understanding are the building blocks of learning.

Never in history has something grown that lacked the above criteria

The techniques found throughout this manual do not belong to The RDA and are the rightful property of every Rope Dartist the World over, further,

this work is not complete

This manual is dedicated to Rope Dartists of all styles and disciplines

Dart Life
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ROPE DART ACADEMY

®

Styles of Dart Manipulation

Tethered - Dart play whereby the rope is attached/tethered to the Anchor hand

Non-tethered - Dart play whereby the rope is not attached/tethered to the Anchor hand

Martial- The traditional style of rope dart where all movements are extremely applicable in its use as a weapon. Emphasis is on accuracy, speed and power

Dance - Dart play where its use is not confined to Martial application and is a form of self- expression wherein the rope dart is used as a dance prop

Flair- The addition of eccentric body movements (spins, jumps, ground rolls, kicks, barrel rolls, etc.)

Contact- The manipulating of a Rope Dart without the use of one's hand grip

Flow- Pure state of being with a Rope Dart using any of the above disciplines

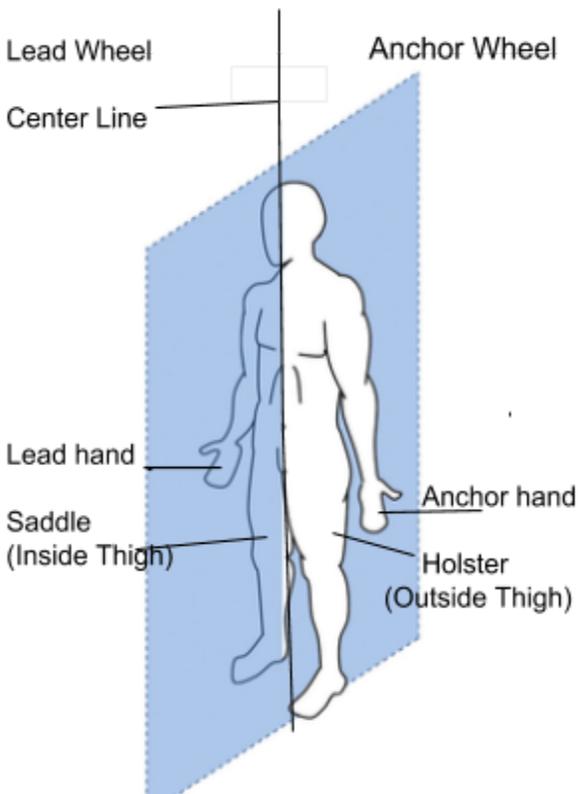
PLANES

A Rope Darts Plane is the simple relationship between the Dartists shoulders and the Darts movement

Lead and Anchor Vertical Wheel Planes (Sagittal)
for a Right side dominant Dartist

Reverse below diagram for a Left dominate person (i.e. Left side of diagram becomes Lead Wheel)

Right side
dominant



Lead Wheel Plane - The Vertical Wheel plane on the Lead side of the body. Described as perpendicular to the shoulders

Anchor Wheel Plane - The Vertical Wheel plane on the Anchor side of the body. Described as perpendicular to the shoulders

Lead hand - The dominant and controlling hand, typically the non-tethered hand. Responsible for accuracy in projection (line control)

Anchor hand - The slack holding, non-dominant hand, typically tethered to the hand/wrist. Responsible for retrieval (slack control)

Saddle side - The inside/medial area of the thigh and leg

Holster side - The outside/lateral area of thigh and leg

-Feet should be staggered, eyes focused forward. (aka 'Fighting stance').

Above diagram does not reflect feet staggered

Vertical Wall and Dark Wall Planes (Frontal)

-The darts spin activity is directly in front of, or, behind the body.

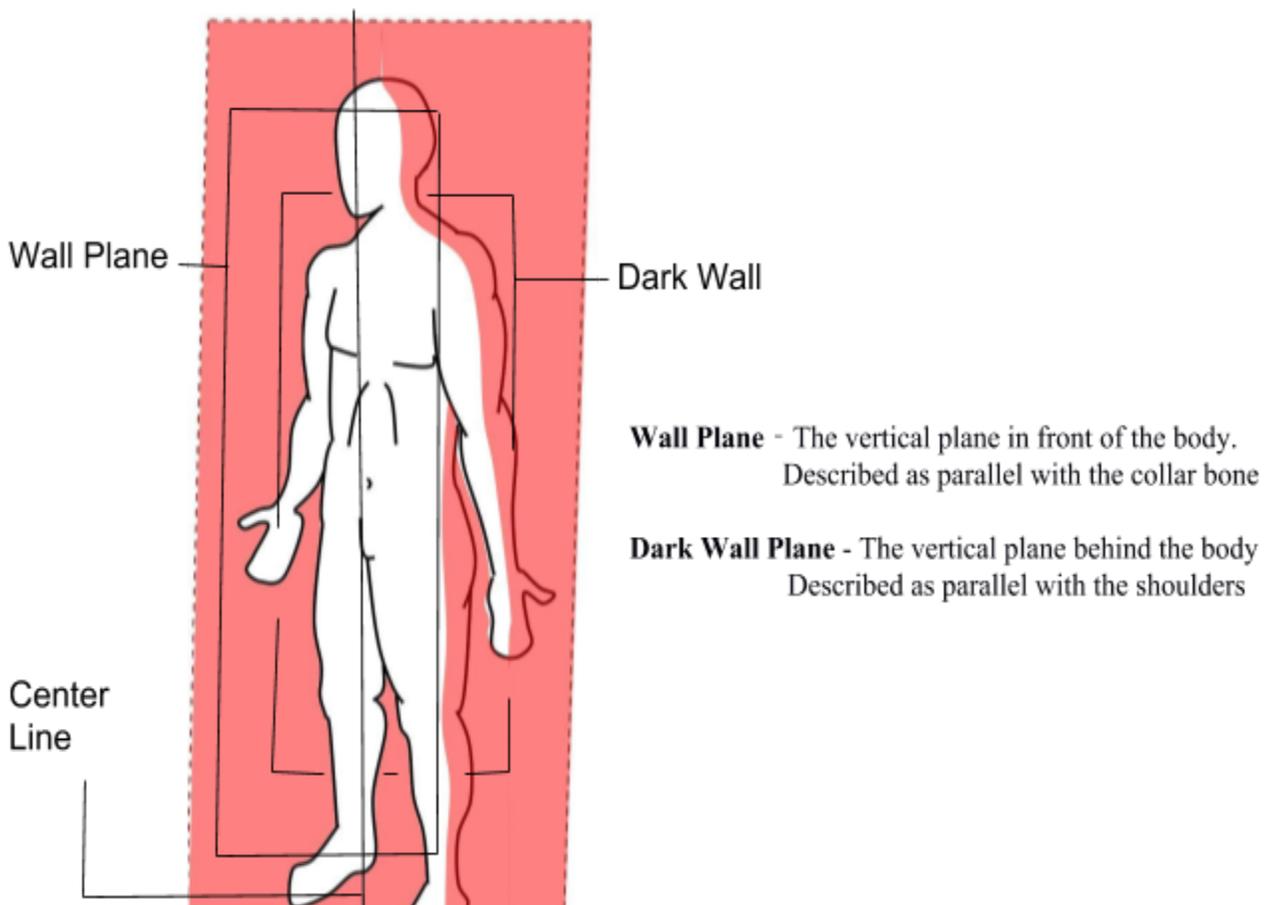
-For Wall Plane, Imagine squarely facing a wall, the darts swing path, wrap entrance, or, spin would be in between the body and wall

-For Dark Wall, the Darts swing path, wrap entrance, or, spin, would be behind the body

-In both Wall and Dark Wall planes, feet are typically parallel, which reduces the surface area of the body that might otherwise obstruct the plane.

-The term, 'Dark' is also used to describe any shot, or, projection of the Dart that travels behind the back when in Wheel Plane (i.e. A Lead elbow shot in Wheel Plane that projects behind Dartist)

- The term 'Dark' is also used to describe a wrap that originates on the Anchor side.



Horizontal Planes (Transverse)

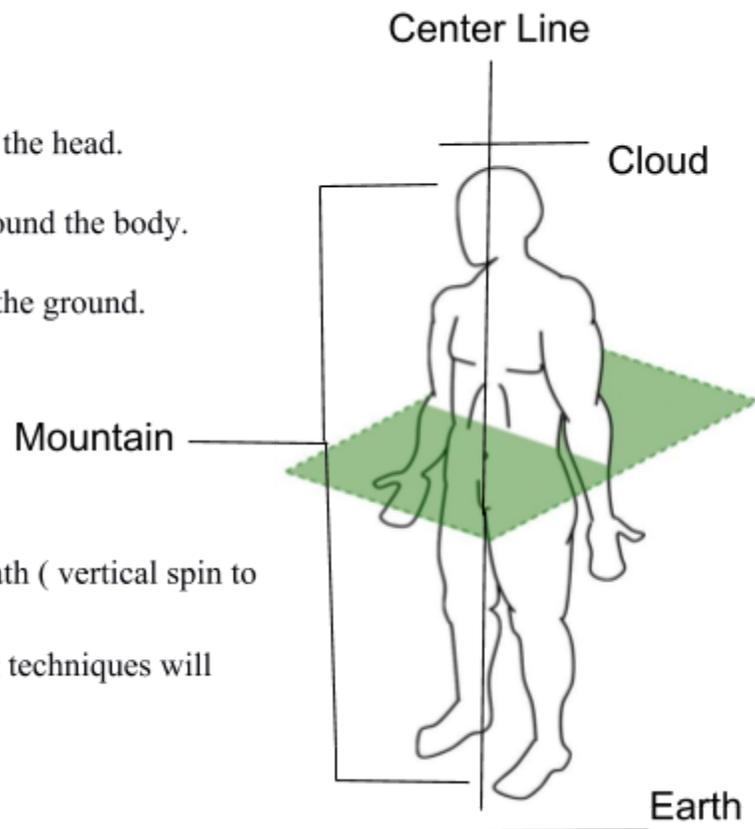
Cloud Plane - The horizontal plane above the head.

Mountain Plane - The horizontal plane around the body.

Earth Plane - The horizontal plane along the ground.

Plane Break - Changing the darts plane/path (vertical spin to horizontal spin is a basic plane break.)

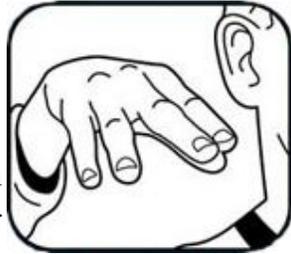
Many intermediate and advanced wrapping techniques will utilize shifting / breaking planes.



GRIPS, HAND and ARM POSITIONS

Vulcan Grip - A grip, that partitions the use of either hand, to control and manage two or more points of contact. The "V/" shaped hand, (typically separated between the middle and ring finger); allows for the use of the Thumb Hold (or 'finger gun'), along with creating a secondary (or even tertiary) grip point in that hand.

Underhand Grip - The rope is on the palm, The hand is literally resting 'under' would not fall. Hand is similar to

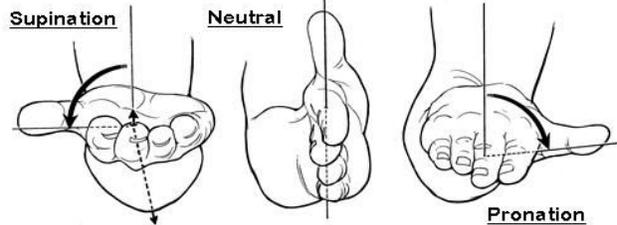
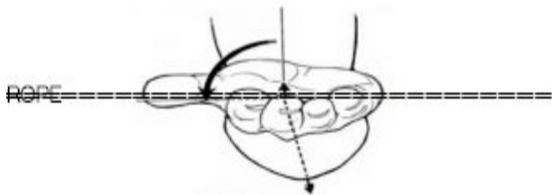


the palm, the rope'. an underhand throw position when throwing a ball.



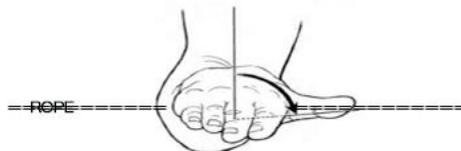
face up; hand is supinated. Hand can open and rope

Underhand Grip



Overhand Grip - The rope is being held up by the hand, palm facing down; hand is pronated. In this position, if the hand lets go of the rope, the rope would fall. Hand is similar to an overhand throw position when throwing a ball.

Overhand Grip



Thumb Hold - Looping rope around thumb (usually Anchor thumb) to create a 'no knot'/ keep a wrap closed. The 'finger gun' (gun-hand position) is typically associated with this Thumb Hold.

Wing Arm - Arm position whereby the elbow joint is flexed.

- Can happen in either Wheel , or, Wall Planes

- **Up Wing** represents the elbow flexed with fingers (when extended) pointing up

-**Down Wing** represents the elbow flexed with fingers (when extended) pointing down



Up Wing

BASE TECHNIQUE TERMINOLOGY

Home Position - Beginning position where all techniques come from.

Vertical Plane

-Home Position #1 Vertical Wheel Plane, Down Spin, Anchor foot forward, feet staggered (boxing stance)

-Home Position #2 Vertical Wheel Plane, Up Spin, Anchor foot forward, feet staggered (boxing stance)

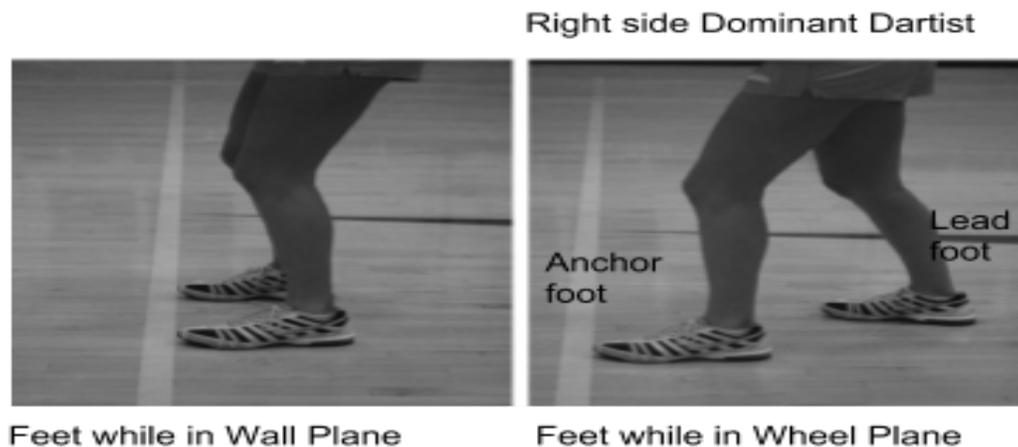
-Home Position #3 Vertical Wall Plane, Anchor Spin, feet are parallel

-Home Position #4 Vertical Wall Plane, Lead Spin, feet are parallel

Horizontal Plane

-Home Position #5 Horizontal Cloud Plane towards Lead side, feet can be either staggered, or, parallel

-Home Position #6 Horizontal Cloud Plane towards Anchor side, feet can either be staggered, or, parallel



Down Spin - A spin in the wheel plane that is perceived by the dartist as 'falling'.

Up Spin - A spin in the wheel plane that is perceived by the dartist as 'rising'.

Anchor Spin - A spin in wall plane that is falling towards the Anchor side. (Anchor Spin is ideal to Lead Cast)

Lead Spin - A spin in wall plane that is falling towards the Lead side. (Lead Spin is ideal to Anchor Cast)

Horizontal Lead Spin - Any horizontal plane rotation where the dart appears to be spinning towards the Lead side.

Horizontal Anchor Spin - Any horizontal plane rotation where the dart appears to be spinning towards the Anchor side.

Pendulum Swings - The simple projection of the dart, back and forth, or, side to side;

Rising Cast - Projection of dart forward, towards focal point. Cast from up spin while in the Wheel Plane.

Dark Cast - Projection of dart behind, towards blind spot/away from point of focus; cast on the down spin in Wheel Plane.

Lead Cast - Projection of dart towards the Lead side, when in wall plane.

Anchor Cast - Projection of dart towards the Anchor side, when in wall plane.

Shot - Any Projection of the dart using a body part. (For example: Elbow shot, foot shot, knee shot, etc.)

Spin Shot - Any vertical or horizontal spin around a body part, either against (anti-spin)

or with (isolating) the darts trajectory, that does not fully encircle/wrap the body part, which results in the projection of the dart (for example: Neck spin, Shoulder spin.) Also, any spin under or over a limb or ligament then rotating (the limb/ligament/or your body) 90/180 degrees to shift the direction of the spin, building momentum on the dart (for example: Thigh spin)

Slack - The rope between the Lead and Anchor hands

Line - The rope between the Lead hand and the Dart head

Retrieval - The act or process of retrieving the projectile; retracting the rope to pull the dart back towards the practitioner. (For intermediate and advanced practitioners; the retrieval is the 'empty space' between two techniques, or 'the bridge')

Reel - Quick shortening of the rope

Stalls- Smooth absorption of momentum during a cast or retrieval; Going with the darts motion along its plane, slowly resisting the force to a halt and/or reversed back the other way. It is easier to alter trajectories or change planes from a stalled position.

Rotations - Any vertical or horizontal rotation used to set up a technique. A rotation is also referred to as a 'Beat' ... One Rotation = One Beat.

Crossers - Diagonal transition between sides; “figure 8.” Crossers can be used with Plane Breaks

Twining - The encircling of a body part with the Rope for the Purpose of Shooting, or, Stalling. For example; An Elbow Shot happens when the rope twines around the bend/crook of the elbow and projects.

Wraps - The initial set up for any technique where the rope dart encircles various parts of the body and is snug upon completion. These can be single, double or multiple circles around the body and can be empty knotted ('no knots') or knotted ('yes knots'). Multiple wraps are generally referred to as 'stacking'.

Stacking - Building wraps on top of each other, utilizing multiple wraps in sequence

Knots - Any wrap held together with one hand, usually for the purpose of adding more wraps (see Stacking), or, to hold a Wrap closed for the purpose of Spinning, or, short shots

-**No Knot**: The rope appears to be tied around a person, but is not.

-**Yes Knot**: The rope is, in fact, tied around a person.

Tie - Any wrap that is held together with two hands. ('Dark Scorpion Sheds Armor', for example)

Throw - Any physical hand catch of the dart, which results in the practitioner throwing the dart.

Guide - Any use of the hand / palm or forearm that does not result in a grip, pinch or catch (for example, the Dragon Wrap will use the Anchor hand to 'guide' the rope as it passes over the Anchor side shoulder)

Crow - Using elbows and/or armpits in order to guide the swinging dart

Passing - Any physical passing of the rope between the Lead/Guide and Anchor/Tether hand.

Binding - To make secure by tying, binding techniques are used in close quarter, hand to hand combative situations. Binding is effective for setting up throws and sweeps.

Tangle - A bend in the rope (from rope on rope contact). Typically present in the Cradle Wrap.

Stealing Step - Popular footwork in Rope Dart where one foot plants behind the other foot in order to gain ground or change body position, without affecting the directional plane of the spin while advancing, retreating, wrapping, or, pivoting.

WRAPS AND WRAP TERMINOLOGY

Dart Path - The objective, observable path the Dart takes when traveling around the body

Entrance Point - The point on the body where the dart passes first. Examples of entrance points are under the Lead armpit (as in Dragon Wrap) and over the Anchor shoulder (as in Scorpion Wrap)

Exit Point - The point on the body where the dart releases from/projects from the body that created the initial wrap (at least two points of contact). For example, the Exit point in Dragon Wrap is the Anchor shoulder; the Exit point in a Dark Scorpion Wrap is the Lead armpit.

Shot Point - The part of the body that the dart will be projected from. This could be the elbow, knee, foot, neck, thigh, waist or hand. The shot point can also be the originating entry point of the wrap.

Belt Wrap - Basic waist wrap, whereby the dart travels around the waist. The dart will cast out towards the lead side while in Wall Plane and pendulum back behind the body towards the Anchor side. Anchor hand will hold knot closed, Lead hand will regain control of the Line

Collar Wrap - A wrap whose dart path is similar to a belt wrap. The dart Travels in Front of the body towards the Lead side, is caught by the Lead hand and then pendulums back behind the body where it is caught by the Anchor hand. The dart then continues to pendulum back to the Lead side where it is again caught by the Lead hand. At this point throws and shots are available. The defining difference between the Collar and Belt Wraps are the 'Wing Position'. An Up Wing will result in a Collar Wrap, a Down Wing will result in a Belt Wrap

Necklace Wrap - The dart travels over and around the neck from one side to the other forming a 'no knot'. In essence, a necklace wrap is a one-handed collar wrap.

Cradle Wrap - A cradle wrap is the taking up of slack by which the rope is wrapped from one hand to the other. By this process false knots, slip knots and rope bends can be used to redirect the rope darts rotation. Tangles create a solid point of contact, between the Anchor hand and Lead hand, to manipulate the dart from

Dragon Wrap - Shoulder wrap that happens when the rope is cast under the Lead armpit traveling upward diagonally across the back and over the Anchor shoulder. The Anchor hand should be raised to make contact with the rope and guide the dart over to the Anchor shoulder.

Dark Dragon Wrap - Reversed Dragon Wrap: Body wrap where the rope dart travels under the Anchor armpit, proceeding diagonally across the back and over the Lead shoulder. The Lead hand should be raised to make contact with the rope and guide the dart

Scorpion Wrap - Body wrap where the dart travels over the Lead shoulder, diagonally across the back and comes out under the Anchor armpit. A Scorpion Wrap is easier to assume off of a retrieval, as opposed to a Cast

Dark Scorpion Wrap - Reversed Scorpion Wrap: Body wrap where the dart travels over the Anchor shoulder, proceeding diagonally across the back and comes out under the Lead armpit.

Butterfly Wrap - Rope dart travels across the back of the neck, from Anchor side to Lead side, entwining the Leads Deltoid, passing under the Lead armpit and around the back side of the waist, returning to the Anchor hand. Similar to a Scorpion wrap, the Butterfly wrap works best off of a retrieval

Dark Butterfly - Reversed Butterfly Wrap: Lead cast. Upon retrieval the Dart travels behind the back and will wrap the Anchor deltoid (dart path: enters armpit from behind and travels up in front of body, across the back of the neck towards Lead side and rests on Lead Deltoid in front of body

Manacle Wrap - Occurs when the rope dart travels over Lead wrist, to over Anchor side (forearm/elbow, bicep ...etc.) and then back again over Lead side (forearm, elbow, hand ...etc.)

Dark Manacle - The same description as above (Manacle Wrap), however, Dark Manacle wrap happens behind the back in Dark Wall

Overlord Wrap - A wrap that is ultimately a double elbow wrap happening behind the back. Lead cast, dart will travel behind back upon retrieval and twine the Anchor elbow. The rope dart then pendulums back from the Anchor elbow to rest on top of the Lead elbow, from which you may execute stalls, shots and/or spins.

Gauntlet Wrap - A wrap that originates in the hand and runs down the anterior or posterior side of the forearm, under the elbow and then back up the other side to the hand or thumb hold. Can be utilized from both Anchor and Lead sides.

Leg Wrap - A wrap created when the dart travels under one or both legs, which can originate either from Saddle Side or Holster Side.

Sunrise Wrap - a contact technique (which uses the inner elbows and neck as contact points), casting the dart in an arc above the head (in a rising and falling motion along the dark wall plane over the back), from elbow to elbow, while pivoting 180 degrees

SHOTS

Shot - A projection of the Dart which utilizes the twining of the rope around a joint

Elbow Shot - Happens when the rope twines the elbow joint for the purpose of generating shots either forward, backward and upward. Elbow shots happen on both Lead and Anchor elbows

Smashing Elbow - When the dart is shot from the elbow, on the down spin, but projects forward

Poki - Repetitive Smashing Elbow Shot

Knee Shot - Happens when the rope twines the knee joint for the purpose of shooting. Knee shots can be executed by both Lead and Anchor sides and can be shot either forward or backward. Used across many styles.

Dead Foot Shot - Happens when the Dart is motionless on the ground. The Dartist will wrap their foot around the leash and kick forward, shooting the Dart

Foot/Kick Shot - Happens when the rope twines the ball and toe line/instep of the foot for the purposes of shooting. Foot shots can be executed on both Lead and Anchor side and can be shot out in many directions. Used across many styles.

Hanging Foot Shot - Happens when the dart is stalled, laying just atop the instep(shoelace area) of the foot, absorbing its momentum and redirecting it back out into a shot.

Heel Shot - Happens when the rope twines the heel for the purposes of shooting. Heel shots can be executed on both Lead and Anchor heel and can be shot either forward or backward

Hand Flick Shot - Happens when the rope twines the palm of the hand or fingers as the hand rotates for a timed release; for the purposes of shooting. Hand shots can be performed on both Lead and Anchor hand and be shot in any direction. Commonly referred to as the “**Canadian Slap.**”

Shoulder Shot - Happens when the rope twines the shoulder and projects forward. Shoulder shots can be performed on both Lead and Anchor shoulder and can be shot either forwards or backwards.

Head Shot - Happens when one uses the head as a fulcrum for a shot.

Wrist Shot - Happens when one uses the wrist as a fulcrum point for a shot. Movement resembles a straight punch.

Glute Shot: Happens when one uses the hip/gluteus maximus as a fulcrum point for a shot.

SIDES

(Both arms are active during projection and retrieval; however, each has a different dominant role)

Anchor Side

- The side of the body that the rope is tethered to, or, in the case of non-tethered, the side that is holding the rope
- For tethered style it is typically the non-dominant side
- Feeds rope into and retracts rope away from Lead hands grip.
- Dominant responsibility is the darts retrieval
- Grips and manages rope length as well as slack.

Lead Side

- The side of the body that is directing / leading the forward movement of the dart.
- For tethered style it is typically the dominant side.
- Responsible for the darts projection and accuracy.
- Grips and manages rope length as well as line.

Drills and Techniques

Pendulum Swings - ('Threading the Needle')

In Wall Plane:

- Feet parallel
- Start letting out short amounts of rope from side to side, gradually increasing length.
- Anchor will be feeding and retracting the rope through the Lead hand
- Lead hand is responsible for dictating whether the path the dart travels is in front ('Wall Plane') or behind practitioner ('Dark Wall Plane')
- When the dart projects towards the Lead side it is considered a 'Lead Cast'
- When the dart projects towards the Anchor side it is considered an 'Anchor Cast'

In Wheel Plane:

- Feet staggered. (fighting stance)
- Start letting out short amounts of rope, back and forth along Lead side, gradually increasing length.

- Anchor will be feeding and retracting the rope through the Lead hand
- When the dart projects forward from an up spin it is considered a 'Rising Cast'
- When the dart projects behind from a down spin it is considered a 'Dark Cast'

Elbow Spin

- Home Position #1
 - Wheel Plane (Down Spin)
 - Anchor foot forward
- Dart travels under Lead armpit and spins up (continues motion). At Dart apex, Lead foot steps forward, into Wall Plane while bringing Lead hand to Center Line
- The Dartist should now be in Wall Plane with a Lead spin (Home Position # 4)

Elbow Spin Reversal

- Continue from the previous position above (Home Position # 4)
- Wall Plane (Lead Spin)
- Raise Lead elbow (arm flexed in front of body) cutting through the wall plane
- Dart travels over Lead shoulder and under armpit. As this happens; Lead foot takes a step backward (reversing the foot movement), ends with down spin in Wheel Plane Spin
- The Dartist should now be back to their original Home Position

Thigh Spins

- Home Position #1
 - Wheel Plane (Down Spin)
 - Anchor foot forward
- Dart travels under Lead thigh (saddle side)
- Dart travels under Lead thigh and spins up (continues motion). At Dart apex, body spins 360 degrees so that body is now facing the opposite direction
- Dart shoots forward upon release, Or continues the spins momentum (Up Spin)
- Practice entering the technique from Holster/Anchor side as well (in Wall Plane)
 - Attempt walking forward while alternating thighs

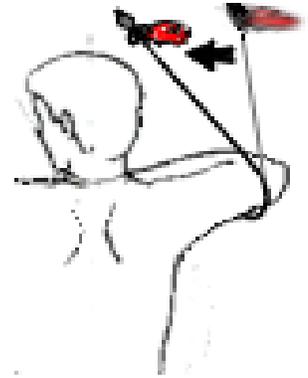
Neck Spins

- Home Position #1
 - Wheel Plane (Down Spin)
 - Anchor foot forward
- Body will then SHIFT into Wall Plane (pivot on toes, both feet should remain in contact with ground)
- This will cause an Anchor Spin while in Wall Plane (Home Position #3)
- Neck bisects the plane so that contact is made
 - Once a full rotation around the neck, at Darts apex:

- Step forward with Lead foot into Wall Plane
- This will cause rope to unwind from neck
- End result has the Dartist in Home Position #4
- When comfortable, practice double wraps and attempt walking forward while alternating side

Lead Elbow - Rear Shot (Dark)

- Home Position #1
 - Wheel Plane
 - Down Spin
- Raise Lead elbow, to shoulder level, 90 degrees with the body
 - Forearm is parallel with arm
 - Rope should make contact at around crook of elbow
 - Flexed elbow (now bisecting plane), is ready for twine
 - Shoot behind/toward Lead side by extending the arm out
- Attempt stalling the rope dart using the wrapped elbow
- Try incorporating 'Stealing Steps' while shooting.
- Practice single and double wraps while shooting.



Anchor Elbow Shot

- Home Position #4
- Wall Plane (Lead Spin)
 - Raise Anchor elbow 90 degrees, to shoulder level, on center line
 - Flexed elbow bisects the plane
 - Rope wraps under and over Anchor elbow
 - Dart projects towards Anchor side
 - Progress to stepping forward towards Anchor side with Lead foot, 'following' the darts projection (step 180 degrees)

Lead Elbow - Forward Shot (Rising)

- Home Position #2
- Wheel Plane (Up Spin)
 - Elbow and body position are the same as the Rear Shot on the Lead Side
 - Rope dart swings over and under crook of Lead elbow (flexed)
 - Dart will twine the elbow one and a half times. As the Dart comes around the second time the student will extend at elbow, 'punching' Lead arm forward
 - Step forward with Lead foot upon projection of the dart

Anchor Elbow - Forward Shot (Rising)

-Home Position #2

-Wheel Plane (Up Spin)

-Elbow and upper body position for forward Anchor shot is the same as Lead Elbow forward shot

-Lead hand crosses over to Anchor side, rope lays over elbow, allowing to twine

Lead Knee - Forward Shot (Saddle) - (Can be performed using Anchor knee as well)

-Home Position #1

-Wheel Plane (Down Spin)

-Raise Lead knee to 45 degrees in relation to torso; now rotate thigh so that knee is 45 degrees outward (towards Lead side)

(Remember to keep toes pointed down/foot should be under the glutes, knee should be completely flexed)

-Rope should make contact on the inside/medial (saddle side) part of the knee

-Rope should have a 45 degree angle in relation to knee when making contact with the knee

-The dart will twine knee one rotation, as the Dartist feels the 'pull' of the Dart forward they will let go of rope with Lead hand allowing the Dart to project forward

Anchor Knee - Forward Shot (Holster) - (Can be performed with Lead knee as well)

-Home Position #1

-Wheel Plane (Down Spin)

-Raise flexed (45 degrees) Anchor knee and rotate thigh inward at a 45 degree angle with toes pointed down

-Rope should make contact on the outside(holster side) part of the knee cap

-Rope should be placed at a 45 degree angle when making contact with the knee

-Connect the knee 1/2 way down the rope from grip point; Using your hips to thrust the knee forward and out

(Remember to tuck hands in, so they are out of the darts pathway)

-The dart will twine around the knee and project forward

Lead Foot Shot - (Can be performed with Anchor foot as well)

-Home Position #1

-Wheel Plane (Down Spin)

-Lead knee is raised (thigh in relation to torso is 90 degrees and shin in relation to thigh is also 90 degrees)

-Lead thigh will now pronate 45 degrees

-Lead knee is kept pointed inward to prevent Dart from hitting knee

-While the Lead toes will point out, at 45 degrees (during the shot)

~The toes only point outward at the moment of contact; until then, the toes should remain parallel with plane and aligned with the leg. (The toes might otherwise obstruct the plane at an inappropriate moment)~

-Position the Lead wrist directly above the Lead kneecap;
Placing the Wheel plane 'in-parallel' with the raised Lead leg
(reducing shot point motions and minimizing distance
between plane and fulcrum), until ready to shoot

-At this point; pronate the Lead toes into the plane, aiming to
connect with the rope (between the arch and the toes)

~The surface area on the rope taken up with the foot, in creating the shot point for a kick shot, requires less wrapping
clearance than the knee does in order to project~

-As the dart begins to twine the foot, slightly pull back the toes (dorsiflexion, Fig a.)
when shooting, then thrust the toes forward (plantar flexion, see Fig a.)

-Combine the thrust of the toes forward
(plantar flexion) with the knees extension to help thrust the dart forward

Tips for Knee and Foot Shots

Figure a.)

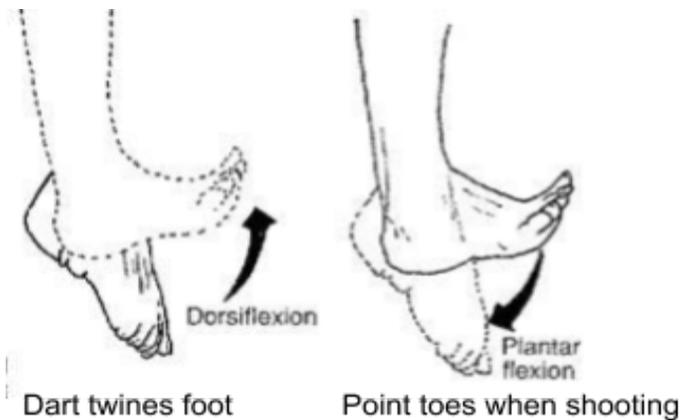


Fig a.)

Foot motion during kick shots.

-Dorsi flexion: while making contact
as dart begins to twine.

-Plantar flexion: thrusting the dart
forward for shooting

Fig b.)

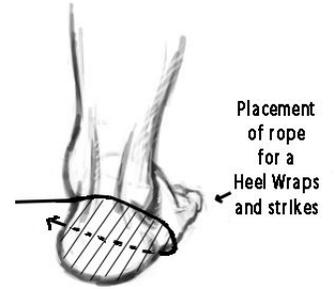
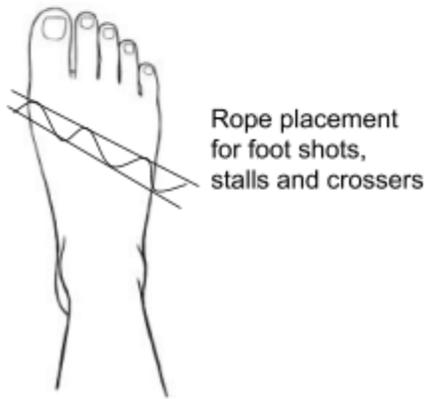
-Rope placement for knee shot

Fig c.)

-Heel Shot: dorsi-flexed foot
produces the heel as a fulcrum point

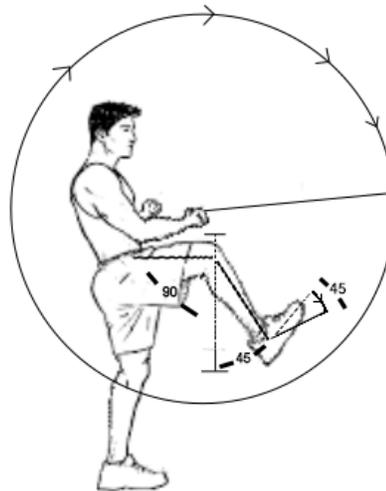
-Midfoot: region of foot to perform
'crossers' or absorption 'stalls'

-Forefoot: performs/thrusts 'forward
shots' and 'toe wraps' for example.



Tips for Aiming with Kicks

Down Spin, raise knee to 90 degrees in relation to torso



*As the dart falls forward and the rope is horizontal with the ground; at eye level:

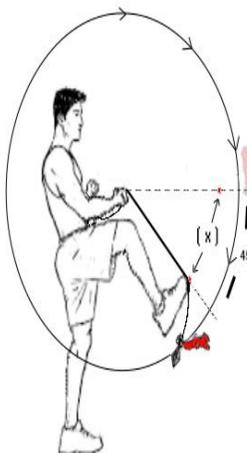
*Extend the Shin out to a 45 degree angle

*Keeping toes Pointed Up (Dorsi Flexion)

and

*Toes angled out to the side, (45) (placing toe-line into the wheel plane)

*While maintaining a straight knee

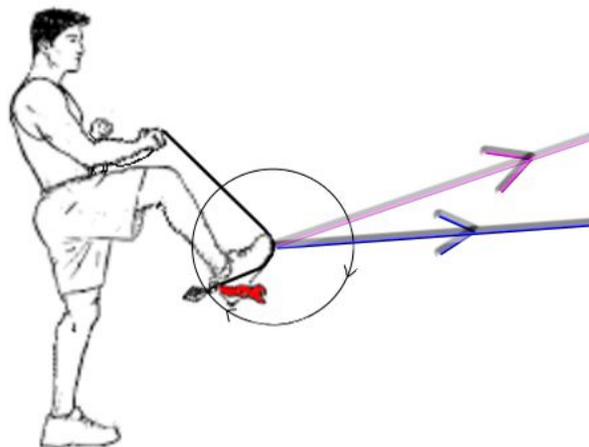


* As the Dart falls, the rope will come to a 45 degrees angle, upon which;

* The protruding toes will make contact with the rope, at the 3/4 mark (Indicated with an (X))

* The toes have become the new fulcrum of the spin, in which the Dart will begin to orbit around

* Since the distance between the Dart head and the Fulcrum point, have shortened; the speed of the orbit increases. (As the surface area, of the rope, wraps the toes; the shorter that distance becomes; thus the more momentum is built on the Dart)



Basic Foot Shot / Lead

Side - (Can be performed with Anchor foot as well)

- Home Position # 1

-Wheel Plane (Down Spin)

-Lead knee is raised (thigh and shin at 90 degrees)

-Lead shin extends forward (at 45 degrees)

-Lead knee is kept straight;

-While the Lead toes will point out, at 45 degrees (during the shot)

~The toes only point outward at the moment of contact; until then, the toes should remain parallel with plane and aligned with the leg. (The toes might otherwise obstruct the plane at an inopportune moment)~

-Position the Lead wrist directly above the Lead kneecap;

Placing the Wheel plane parallel with the raised Lead leg

(reducing shot point motions and minimizing distance

between plane and fulcrum), until ready to shoot

-Rope will be in a 45 degree angle down, when making contact upon the ball of the foot.

-At this point; Protrude the Lead toes out into the plane, aiming to connect with the rope (between the arch and the toes)

3/4's of the way down from the grip point

-As the dart begins to twine the foot, slightly pull back the toes (dorsiflexion, *Fig a.*) when shooting, then thrust the toes forward (plantar flexion, see *Fig a.*)

-Combining the knees extension to help thrust the dart forward

Hanging Foot Shot – (Absorption Stall + Redirection with Foot)

~Dart is stalled over the shoelace area of the foot, absorbing its momentum and redirecting it back out into a shot~

- Home Position #1

-Wheel Plane (DownSpin)

-While the dart is descending from above; begin to raise the foot of choice

-As the Dart becomes horizontal (meeting eye-level), the foot should already be raised

-The foot begins to descend, along the same plane; BEFORE and While the dart descends (at a similar yet slightly slower pace than the dart.)

-Once contact is made with the top or side of the foot; gradually decrease falling speed (while continuing the motion of the swing with the foot)

The centripetal force shall keep the dart cradled to the foot as the foot winds back

-At this point the foot is now primed to execute the shot with a forward kick

Horizontal Step/Jump Through

~jumping or stepping through the horizontal swing plane, in either direction~

- Home Position #6
- Cloud Plane (Anchor Spin)
- Lead Hand will be positioned close to the groin during the horizontal swing
- The dart approaches Anchor side; as the Anchor leg kicks up, clearing the dart as it enters under the raised leg
 - Anchor leg then replants and the Lead leg raises up, allowing the Dart to make a full Horizontal rotation
 - This technique may include jump or just stepping through the plane

UPPER BODY WRAPS

Belt Wrap - (Wrap positioned along the waistline)

Home Position #3

- Wall Plane (Anchor Spin) Lead Cast
 - Upon retrieval; raise Lead arm up to guide the dart behind the back, dart will continue out towards Anchor side (rope is now wrapped around waist)
 - Allow the dart to fully project, while placing an Overhand Grip hold with the Anchor hand. Anchor hand must go up and over the wrap allowing the rope to 'fall' into Anchor hand
 - Shift stance to Wheel Plane and reestablish control with the Lead hand as the rope begins to fall
 - Wheel Plane (Down Spin)
 - Continue the motion of the dart; casting the dart under Anchor armpit, so that it travels up, across the back and out over the Lead shoulder
 - It is important to let go of the Anchor grip as the darts shot travels over the Lead shoulder

Cradle Wrap - (Rope Managing Wrap/Taking Up Slack)

- Wall Plane (Anchor Spin) Lead Cast
 - Allow rope to rest on Lead wrist (or to glide through the palm)
 - Apply a thumb hold and direct the dart back towards the Anchor side (in front of body) resting the rope on the Anchor wrist OR catching the dart with Anchor hand
 - From this position; various spins, swings, tangles and shots can be accomplished

Reel- (Similar To Cradle Wrap)

-Home Position #1

-Wheel Plane (Down Spin)

- Raise the Anchor hand into 'wing arm' position; while tossing the dart up high (with Lead hand)
- The rope flies over the Anchor hand until it is fully extended;
The rope will then begin to fall on top of the 'wing arm' and continue its wrapping momentum and travel towards the Lead hand
- The Lead hand will catch the rope, with rope also in Anchor hand; in the same down spin direction
- From this position; various swings, tangles, sweeps/crossers and shots can be accomplished

Gauntlet Wrap - (Forearm Wrap + Stall)'(Can be performed with either an Up or Down spin)

~The shoulder and/or elbow joints can both be used as a fulcrum~

Down Spin on Lead Arm:

- Home Position #1
- While holding the rope with Lead hand(initial hold), let the dart travel along the Lead forearm and under the armpit/elbow and wrap over the Lead shoulder/elbow
- As the dart makes it decent from over the Lead shoulder/elbow, catch the dart, with Lead hand (secondary hold) using 'finger gun' position/thumb hold
 - From this position, stall the dart and/or throw,
(releasing both the initial and the secondary hold)

Up Spin on the Lead Arm:

- Home Position #1
- Lead foot forward
- While holding the rope with Lead hand, let the dart travel over Lead side shoulder, or elbow
- As the dart makes its full rotation from out the Lead armpit/elbow, catch the dart with Lead palm/'finger gun'
 - From this position, stall the dart and/or throw (releasing both the initial and secondary hold)

Manacle Wrap – (Slack controlling Pendulum Wrap)

-Home Position # 3

-Wall Plane (Lead Cast)

- Cast Dart over the Lead hands wrist
- Lead hand raises, providing a fulcrum for the dart, to pendulum back toward Anchor side
 - Anchor elbow will dig under the rope as it falls (or rope casts over the Anchor elbow), providing a second fulcrum for the dart to pendulum from
 - Dart will swing back toward Lead side, rope resting on forearm, or, above the Lead elbow

Over Lord Wrap – (Pendulum wrap using both Elbows behind the back)

-Home Position #3

-Wall Plane (Anchor Spin) Lead Cast

-Dart will pendulum back behind the body, under Lead armpit, towards the Anchor side

- Anchor elbow drops under the rope, before the cast begins to fall

This creates a fulcrum point which the dart will pendulum from, back towards the Lead side

- Lead elbow drops under the rope, before the cast begins to fall

-Once over the Lead elbow, the dart may be stalled and/or shot:

(Smashing elbow, Rising Cast forward or Elbow Shot backward, for example)

Sunrise Wrap

-Home Position #3

-Wall Plane Lead Cast

-Dart will pendulum behind the body, under Lead armpit, towards the Anchor side

-Anchor arm reaches back, (allowing the rope dart to fall and make contact upon the elbow)

-Anchor elbow crosses in front, while pivoting the body 180 degrees (anchor foot steps behind) toward lead side

(The rope dart 'sunrises' over head from Anchor elbow to Lead elbow) as

-Lead Elbow extends back to catch and make contact with the falling rope

-From here, retrace the foot work (Anchor foot steps back to original position)

Necklace Wrap - (Neck Wrap, Held With One Hand)

- Home Position #3

-Wall Plane (Anchor Spin) Lead Cast

-As the dart pendulums back toward Anchor side; it will travel behind the neck (above the shoulder line), passing over Anchor shoulder

-Anchor arm raised will catch and guide the rope as the Lead hands releases its grip on rope

-Secure a Thumb Hold with Anchor hand; Regaining control of the dart with the Lead hand

(One line of rope will rest in front of the neck and one line will rest behind the neck at this point, similar to a necklace)

-With thumb hold in place;

-Simultaneously step forward with Lead foot (transitioning to Wheel Plane), while using the Lead hand to send the dart back over the Anchor side of neck towards the Lead side (reversing the path entered from)

-Guide the rope with the Lead hand, traveling out to the Lead hand grip

-From this position there will be one line of rope in front of the neck, two lines of rope behind the neck

- The practitioner has a 'no knot' around the neck; Control of the dart with Lead hand;
- From here; shots, throws and flare moves are possible

~Similar to Collar wrap but The Necklace Wrap will be holding the 'no knot' with One hand, instead of two~

Collar Wrap - (Two-handed Neck Wrap / Taking up more slack)

- Home Position #3
- Wall Plane (Anchor Spin)
- Lead Cast (rope fed through Lead index finger and thumb, 'finger gun' position)
 - Upon retrieval guide the dart back behind the neck, from Lead shoulder to Anchor shoulder and out towards Anchor side, laying the rope atop the neck (like necklace Wrap)
 - Catch and support the rope with Anchor 'finger gun' position
 - Allow the dart to pendulum behind neck, from Anchor side back over to Lead.
 - Catch the rope with the Lead arm and grasp rope with hand
 - From this point one may Cast towards either Lead or Anchor side and attempt to incorporate some elbow shots for a releases as well

The difference between a Collar Wrap and Necklace Wrap is that a Collar Wrap is held with two hands (tie) and a Necklace Wrap is held with one hand (knot)

Butterfly Wrap – (wraps over the neck, around the back and over the shoulder)

- Home Position #3
- Wall Plane (Anchor Spin) Lead Cast
 - Dart pendulums out to Lead side, (guiding the dart behind the back upon retrieval); Simultaneously, the Anchor hand is raised and lays down the held segment of rope, along the shoulder blades. (behind the neck)
 - The dart will travel under the Lead armpit, crossing the back of the torso and exiting out from under the Anchor armpit
 - Grab and maintain hold of the rope with Anchor hand; subsequently regaining control of the dart with the Lead hand, into Lead side Wheel Plane, Downspin

Dragon Wrap - (wraps travels behind the back, from Lead armpit to Anchor shoulder)

- Home Position #1
- Wheel Plane (Down Spin)
 - Cast dart under Lead armpit so it travels up, across the back and over Anchor shoulder
 - Raise Anchor forearm; 'side wing arm', (imitates blocking the sun from your eyes)
 - Rope is guided over Anchor forearm; as Lead hand grips rope in 'overhand grip'
 - Regain control with Lead, while maintaining initial hold with Anchor
 - *Basic release:
 - Lead hand can stall and reverse the motion of the dart; casting it back over the Anchor shoulder, traveling down, across the back and out in front (projecting

forward from under the Lead armpit)/(both the Entry point and Exit point are the same, which is the Lead armpit)

Dark Dragon Wrap - (Dragon Wrap entered from Anchor side / Mirror Image of Dragon Wrap)

-Home Position #1

-Wheel Plane (Down Spin)

-Step Lead foot forward as the dart is Cast under Anchor armpit so that it travels up, across the back and out, over Lead shoulder

-Raise Lead forearm; in 'side wing arm', (blocking the sun from the eyes)

-Rope is guided over Lead forearm

-Anchor hand retakes control of rope dart

-Anchor hand can stall and reverse the motion of the dart; casting it back over the Lead shoulder, traveling down, across the back and out in front (projecting forward from under the Anchor armpit)/(both the Entry point and Exit point are the same, which is the Anchor armpit)

Scorpion Wrap - (Wrap travels from Lead shoulder to Anchor armpit, best set up is off of a retrieval)

-Home Position #1

-Wheel Plane (Down Spin)

- Cast behind you, upon retrieval raise Lead hand to Lead shoulder (Up Wing) so that the Dart travels from the Lead/lateral side of neck/shoulder area, and down across the back exiting from the Anchor armpit

-Step Anchor foot forward during the cast.

-Catch and close the Knot with the Anchor hold, while regaining control with Lead hands

'overhand grip' position

-To release the wrap;

Shoot the dart out from behind the back, so it travels up the back and out in front, overhead, from above the Lead shoulder while simultaneously stepping forward with the Lead foot

(Entry Point = Exit Point)

Dark Scorpion Wrap - (Scorpion Wrap; entered from Anchor side / Mirror Image of Scorpion Wrap)

-Home Position #2

-Wheel Plane (Up Spin)

-Dart is cast over the Anchor shoulder, traveling down the back and out from under Lead armpit. ('rising cast')

-Step Lead foot forward during the cast. (Doing this helps to eliminate friction caused by body surface area when making contact with the rope during the initial cast)

-Catch the rope with both Anchor hold (closes the Knot) and Lead grip in an 'overhand' position

-Dart will fully extend out and pendulum back into a wheel plane spin

***Basic Release:**

- Cast the dart under the Lead armpit so that it travels behind the back and up out from the Anchor shoulder and projects forward. Ensure that both grip holds are released during the shot. (Entry Point = Exit Point)

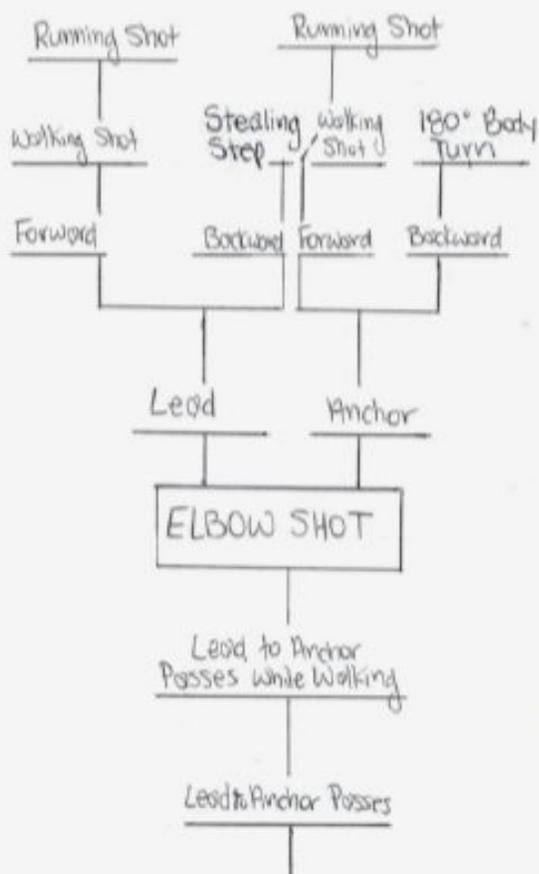
LOWER BODY WRAPS

Saddle Wrap - (Can be performed with both Anchor and Lead legs, Dart travels from inside to outside thigh)

- Home Position #1, #2, #3, #4, #5, #6
 - Wheel, or, Wall Plane
 - As dart rotates down; lift either Lead, or, Anchor leg
 - Let the dart wrap inside and around the thigh, rising up from behind the thigh (exits Saddle side)
 - Catch rope as it comes out from thigh with Lead hand
 - From this position, kicks, releases and throws can be accomplished

Holster Wrap – (Can be performed with both Anchor and Lead legs, Dart travels from outside to inside thigh)

- Home Position #1, #2, #3, #4, #5, #6
 - Wheel, or, Wall Plane
 - During rotation, allow the rope to wrap around the raised thigh
 - Allow the dart to wrap over the thigh, then in between the legs and while rising up;
 - Catch the rope as it exits out the Saddle side of thigh
 - From this position, combined with a stance changes; kicks, releases and throws can be accomplished



From No Where
To Now Here
-Dr. Wayne Dyer

Technique Chart:
 - Pldnes
 - Control
 - Basic Spins
 - Elbow shot

