

The Gait of Running Walk an Explanation

by Elizabeth Graves©2001

The Running Walk is a desirable gait because of the obvious smoothness to a rider. For a horse in good condition, the true natural running walk is an easy gait to maintain and hold for distances. It is a gait that causes the least amount of stress to the horse's entire body. Then why does the gait seem so elusive? Even for a rider with a horse that has all the right gait genetics and structural elements to achieve the running walk?

There are many reasons why the gait seems so elusive.

- First, is simply the lack of understanding of:
 - what the true running walk is
 - what the elements involved are
 - When a horse is doing the gait correctly.
- Second, the desire within the industry for a faster, flashier way of going such as:
 - higher head sets,
 - bigger, deeper over strides
 - Higher lifting of the front legs (animation).

In my opinion this stems from the horse show world. The show circuit desires to keep the human factor entertained and satisfied, thus generating profit among all involved. This is not a bad thing, except when it has caused confusion of the differences between the definitions and elements of a horse's gait. It has also caused riders to ask horses to perform in a manner that is unnatural for an individual's structure, developing physical stress and possible break down as the end result.

- The Third factor in this confusion is all the equipment options such as:
 - bits
 - saddles
 - other mechanical equipment options

Which are presented and we are enticed to purchase.

Then there is the hoof trimming and shoeing options such as:

- unnatural hoof angles
- longer toes
- weighted shoes
- Turn backs and trailers added to offset the effects of the incorrect hoof angles, long toes and weighted shoes.

- Finally are all the equitation styles and the application of these mechanical devices to hopefully get the rider all the desired results and added effects of the running walk quicker and easier. When actually it takes them farther away from the wonderful gait we wanted in the first place.

Understanding and obtaining the running walk is much easier when we simplify and eliminate some of the elements of these three factors.



Above are 3 photos of horses executing natural running walks. Two are carrying riders which are helping to support their horses in gait through simple mechanical aids and proper equitation using seat, hands and legs to achieve and maintain gait. The remaining photo is of a young untrained horse executing the running walk on his own. Later in this article are three drawing of correctly timed running walks with slight variations.

Elements of the Running Walk

Four Beats

The running walk is a four beat gait, independent in set down and in the pickup of the hooves. The hoof support sequence is 2 hooves flat on the ground and then 3 hooves on the ground. It is a lateral sequence in that the hind hoof will set down first, followed by the fore hoof on the same side.

Example:

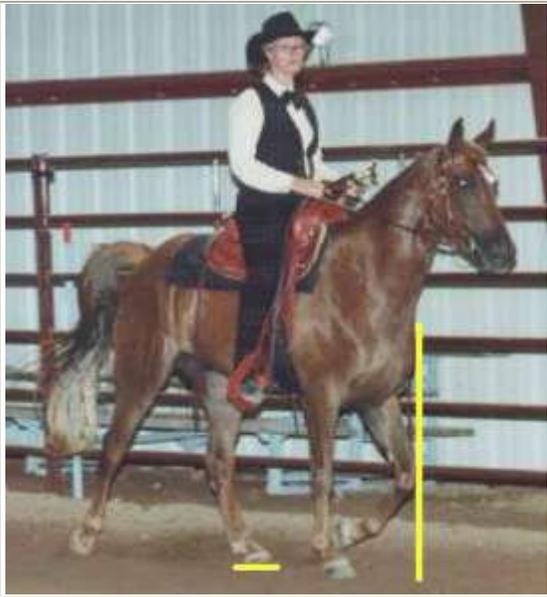
1. right hind
2. right fore
3. left hind
4. left fore

This hoof fall sequence **does not make the running walk a lateral gait** as it has been at times described. It is the **pickup** of the legs and hooves which determines if a gait is lateral, even or diagonal, the running walk is even. The **timing of the pickup and set down** is 1-2-3-4 allowing for some slight deviations yet still *not being lateral or diagonal in the pickup*. These slight deviations are extremely difficult to detect in motion by the human eye and ears, so are well within reason of the gait of running walk.

Evenness

The running walk is **exactly** between the pace and trot (same as is the gait of Paso Llano). To help recognize the slight deviation from evenness; look at the position of the legs at the beginning of the gait sequence.

Correct Running Walk

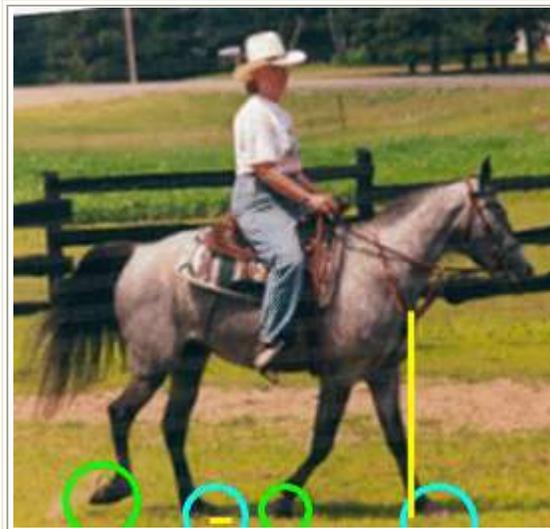
	<p>When the hind hoof is placed on the ground the corresponding foreleg must have moved half way through its pick up and set down stride.</p> <p><i>This can be identified by the position of the front hoof in relation to the shoulder.</i></p> <p>At the moment the hind hoof is flat on the ground the corresponding front hoof should be in line with the shoulder.</p>
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In the following photos are examples of horses going beyond the running walk. One to a diagonal gait and one to lateral in gait.



If the position of the front hoof tends toward being behind this point in its pick up and set down stride, the horse tends toward trot. In this picture you can see the right fore is well behind the left fore that is at its most weight bearing phase.

The circles indicate the ■ left fore and ■ right hind are traveling together and the ■ left hind and ■ right fore are traveling together.



If it deviates in front of the shoulder it tending toward the pace. This horse shows that the left fore is in front of the shoulder and has finished its set down phase and while the left hind is flat on the ground too.

The circles in this photo show that the ■ right fore and ■ right hind are moving together and the ■ left fore and ■ left hind are moving together.

The more deviation from even the more faulty the gait.

Head Shake

Some smooth gaits have a head nod that is poll based and an artificial head flip. I find that the running walk truly does have a vertical (up and down) head shake. There should be *no side to side head motion* in the use of the head during the gait of running walk. An example of a gait with head nod where a lot (to a very slight amount) of side to side motion can be detected in the nod would be the stepping pace.

The head shake of the natural running walk **involves the use of the whole neck to where it attaches to the chest and shoulder.** The head shake is rhythmic and distinct, the motion of this shake runs through the entire body of the horse. When the head is at its lowest point the back of the horse is at its highest point of being level, when the head comes up in the shake the back is at its lowest point of level without going ventroflexed (hollow) . This is the motion that *moves the rider slightly forward and back* along with the rolling motion of the shoulders forward and back while astride without any movement in the croup area.

The head shake of the flat walk is deep and steady, when the horse is moved up into running walk the head shake loses *some* of its *depth in the downward motion* giving the illusion of a faster head shake, when actually it is just shallower by lack of needing to go down to the lowest point for counter balance.

**Counter balance with head use:
(during one sequence)**

- as the right hind leg drives back and the right fore hoof is placed on the ground , the head is lifting
- as the left fore leg is raised the head moves down to its lowest point
- as that left hoof is placed on the ground the head is lifting again, the counter balance is for the fore leg in the air
- The fore leg on the ground does not need to be counter balanced.

The counter balance for the hind is a bit different.

The head shake compliments and aids reach and drive of the hind:

- As the horse reaches under, it pulls its head down.
- As the horse begins to drive off that leg the horse uses its head and neck to pull putting strength into the forward motion.

The use of the head and neck is produced by the coordinated effort of the whole body. The head is the weight at the end of the pendulum. Bringing the head down as much as possible to a deep head shake will achieve maximum length of stride, hence my personal desire for a traditional *larger head* on my TWH's.

This is the ideal; *a productive head shake contributes to the quality and square component of the gait.*

Overstride

Is the measurement of distance of the hoof print of the hind hoof that steps past (in front of) the hoof print of the fore hoof on the same side. It can vary from a few inches to many while 18 seems to be an average. This all depends on the conformation of the individual horse and the development of the gait.

The most efficient use of the hind legs to achieve overstride is: the slightest amount of hock and hoof lift, using **just enough** to create a long, low, sweeping motion lifting the hoof **just enough** to clear the ground.

Length of Stride

Is the distance from toe of the hoof print of the right hind to the toe of the right hind of the next right hind print. The importance of this element being the longer the stride, the more ground is covered with fewer hoof falls. Making less effort for the horse and efficiency of gait.

Looseness

Looseness in the horse in gait is partly a product of conformation and relaxation. It is easier to see in the flat walk but does carry over through the running walk. Looseness can be observed as a motion of the head and neck, into the shoulders. It may also be seen in some horses with the flopping of the ears, lips or a clicking of the teeth in time with the head shake. Looseness contributes to a fluid rhythm of the gait. A horse should display a content expression of eyes and ears while moving actively forward without resistance.

Looseness diminishes as a horse pushes into speed.

Undesirable Elements;

- the presence of a tight, stiff, short strided or choppy element
- pacey or swingy are not accepted as looseness as tending toward these actually is a stiffening that eliminates looseness

The Running walk is an accelerated flat walk.

- The overstride and stride are increased.
- A horse covers more ground in less time, by taking longer steps not necessarily faster ones.
- Many times a horse will appear to lean into the gait.
- The hind legs are reaching under and the front legs are pulling in the ground.

Notice the backs of all three horses in the photo's below.

All three are level, not going to hollow nor going to rounded, are all nicely balanced.

It can also be seen in these photos each horse shows the element of leaning forward into the gait.



Photo 1

The horse in Photo 1 is executing a very close to evenly timed running walk. Notice where the foreleg is positioned under the shoulder, not forward or back. The right fore is at its point of bearing maximum weight while the hind on the same side is at its farthest point back in full contact. This horse is just slightly off perfectly even.

This can be seen if you look at these elements:

- the left hind is about to make full contact
- the right hind will be starting to lift off
- the left fore is not quite half way through its lift off set down sequence and will still be a bit behind when the when the left hind sets down flat.

The half way point of travel for the left fore will be when the hoof is in an even position with the

vertical right leg. This makes this running walk just a hint to the diagonal and very hard to detect if this was a moving sequence, not a still picture.

Some information about the stallion in Photo 1.

1. This was taken about 3 weeks after 60 days of under saddle training.
2. He is dominant to trot and was started bare hoofed, being trimmed anatomically correct with no long toes or unnatural hoof angles.
3. He was started in a broken mouth piece D-ring snaffle.

The horse was extremely easy to time up with all the looseness and head shake one could desire of the running walk. With this horse we had to be very careful not to over collect or allow his head to drop to low, for that would bring up and round his back; sending him to a trot.



Photo 2

Although this photo is at an angle, we can see the gait sequence fairly close. The timing on this horse is actually very close to the horse in photo 1, just a bit farther along in the sequence.

- the right front is at its most bearing point of weight
- the left hind is all the way forward and flat
- the foreleg is under the shoulder, not forward or back
- The left fore hoof is even with the vertical right fore.

Now notice the right hind which is at its farthest point back but has just lifted off with contact still on the toe. This indicates again that this horse could go toward the diagonal but is not to that yet.

Added information on this gelding is when he was acquired by his present owner he was hard wired to pace although he tends to be a "*dominate to trot*" horse.

This horse came with;

1. very long toes
2. weighted shoes
3. a long shanked bit

He was a very tight, stiff going horse and getting him to relax to do a stepping pace was a bit of work. In the retraining of this horse;

1. the weighed shoes were removed, hooves shortened considerably and trimmed anatomically correct for his structure
2. He was re-bitted in a Myler snaffle and taught to dog walk with his head down which was

very worrisome for him. He was not allowed to do this previously under saddle.

Once he was able to walk with his head down, he was taught to do a dog walk, flat walk. With lots of bending and flexing exercises it was possible to bring back the looseness element that had been lost. He was pushed with a low head, collected and pushed in to a straight trot. After this was achieved he was worked up to the running walk from the flat walk.

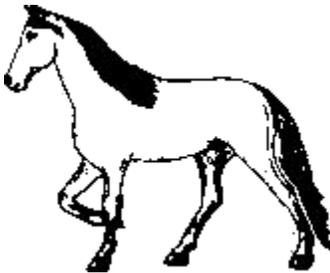
This took lots of time and patience but this is a success story of a lucky horse with a new owner which sought the help and worked to bring this horse back to what he was meant to do, the natural running walk.



Photo 3

In this photo we see a young colt that has not yet been started under saddle and is in the running walk. Again this picture is at an angle but the timing is correct. This colt is the offspring of the horse in photo 1. He will during turn out hit trot 1/3 of the time, pace 1/3, and running walk a 1/3 when moving out at speed. His sire has never been known to pace but his dam will do a trot or pace during turn out.

Below are three sketches of horses doing the running walk. All are correctly timed with a bit of variation in all three in relation to animation.



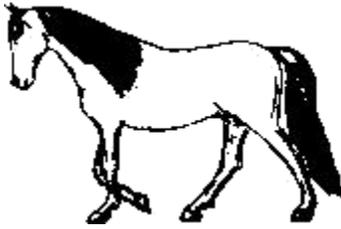
Sketch 1

In the first sketch this horse's right foreleg is in front of the shoulder yet the hoof is at half way between lift off and set down and the right hind is still flat on the ground. This indicates the horse has more animation in the front, which can be seen by the steep angle of the humerus making for more lift and fold of the gait. If the right hind was coming off the ground at this point it the horse would be going to lateral.



Sketch 2

The second sketch is of a horse again perfectly timed up but is middle of the animation spectrum. The humerus on this horse is a bit flatter in angle than sketch 1 but is also longer giving this horse more length of reach in the stride of the front legs.



Sketch 3

The third sketch shows the minimum amount of animation. This horse's right fore hoof is well behind the half way point in the lift off set down phase but the right hind is still flat on the ground and the foreleg is still in line with the shoulder keeping this at a running walk and not going to the diagonal.

Will my horse do a running walk?

My horse is to doing a running walk. (When in fact it is not.)

There is no running walk in this horse.

You hear the above all the time. Just because you own a Tennessee Walking Horse does not mean it will do the running walk and on the other side a horse may be able to do many other smooth gaits besides just the running walk. It is my experience a lot more are capable but are not, again due to the lack of knowing what the running walk is and how to develop the gait within the horse. First is finding the right horse or knowing if you already own a horse that will.



In this photo of a foal I see a good prospect for the running walk. Even though the proportions of this foal may change with growth, the angles in the structure will remain the same. This foal is showing a movement towards lateral of gait in this photo but it still looks like a prospect that should time up even better with the correct development of gait. This foal is nicely balanced, with good stride in the hind and the ability to lean forward and pull in the ground well up front. This is not always the case when looking at a foal. Do not let a youngster that may be showing a pace or trot deter you from consideration. Let them grow and get the muscles to support their

structure which will give them more strength to hold and show tendency to gait. Also know what the [angles in the structure are and if the right ones are there to execute a running walk](#). Don't be alarmed if your foal that was walky as a youngster starts to go out of it with age. It is probably still there and just needs to be taught how to carry themselves to maintain the gait.

Finding The Running Walk In A Horse

Listening for the running walk is an aid in helping one find the gait but is not the total answer. The reason for this is that one listens for the 4 beats of the hoof falls but there are other gaits that also make a 4 beat sound. Even though the timing between the hoof falls can vary in length of timing it can be very hard for someone new to gaited horses to hear this difference in the spacing of time between each hoof fall.

An example;

The running walk is a 1-2-3-4 beat evenly spaced.
The stepping pace is 1-2--3-4 with a longer space between 2 and 3.

In finding the gait one must also **feel for it**. The running walk is a smooth gait but so are many other gaits. There are different signals that will tell a rider if they are going to the desired smooth gait. These other gaits can be a very smooth to a person that has not experienced the gait of running walk.

A straight pace is very easy to feel as it shifts a rider from side to side in the saddle and can be very uncomfortable and it is easy to hear the 1-2 beat of the 2 halves of a horse moving forward and back together.

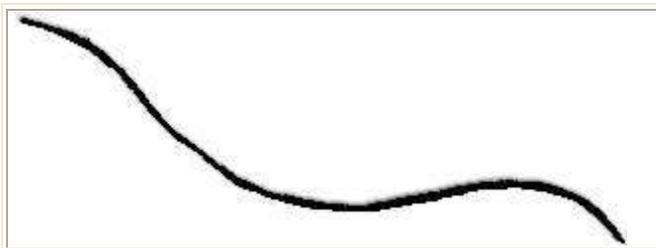
The stepping pace is a smoother gait but there will still be some side to side shift to the rider due to the lateral lift of the legs. A rider should be able to see some side to side motion in the head of the horse; it can be a little seen at the poll and can also be seen in some side to side motion of the horses muzzle from the back of a horse.

The fox trot gives a rider a forward and back motion, no side to side. This done correctly is also a smooth gait but one should be able to feel the lift of the hind legs and breaking of the hock action when the hinds are coming up and forward. There is a definite bump feel in the hind at a fox trot.

The rack and saddle gait are also smooth gaits but tend to move a rider a bit side to side due again to the lateral pick up of each side even though they are 4 beats in hoof falls. The saddle gait (stepped rack) is one that a rider can feel the shorter stride of the gait and feel a slight bump in the base of the spine due to the breaking of the hocks rather than the low sweeping hind legs of the running walk. In the rack gait feels faster. The rack has a lighter off the fore hand, up in front feeling, with more reach to the gait, covering ground faster than the saddle gait.

The running walk is a gait where the rider can feel a slight, soft forward and back movement in the saddle. One should be able to feel the long low reach of the hind legs coming under the horse and the front pulling in the ground giving the sensation of floating across the ground.

When developing the gait in a horse or teaching a horse to carry a rider in the gait one should know the difference in how the back of the horse is carried and learn to feel when the back changes under the rider.



Ventroflexed also will be referred to as hollow or concave. The gaits with these are Pace, stepped pace, rack and saddle gait.



A level back is one of the running walk.



Dorsiflexed will also be referred to as rounded or convex. The gait of fox trot can be from a level back to a slight dorsiflexed back and a collected trot is dorsiflexed in the back.

It will help a rider to first be able to identify these carriage of the back from the ground and then feel them from the back of the horse. It is of a great help to do this bareback without a saddle.

It is often easier to first identify what the leg pick up, hoof set down and timing of the gaits are from the ground, seeing and listening first. Once up on the horse add feeling to the aids of identification. This takes time and patience on the part of the rider. It is also important to understand that a running walk on one horse can feel somewhat different on another horse due to the individual structure of each horse. Riding as many different gaited horse as possible will go along way into understand and achieving a desired gait in a horse. I also recommend not just riding one breed but trying all the different ones available.

Working Toward The Running Walk

There are no quick fixes in developing gait. It takes time, patience and knowledge to get there. It is much easier to teach a horse that has not been started incorrectly. A horse that has had an incorrect start can take much more time getting to the running walk. When a horse has been taught to running walk while learning to carrying it's self, the weight of a saddle and rider it should be easy to maintain when in good working condition. A horse will find it much more comfortable to hold its correct gait than one it is not structured to do or asking a horse to do more in the gait than is possible without stress for that individual.

I want to stress the word TAUGHT as when one goes to forcing through the aids of harsh bits, unnatural hoof angles, weighted shoes and many other "training gimmicks" several things can happen.

1. May take a horse away from the gait of running walk completely.
2. Many times when these are removed the horse falls apart by learning to rely on these aids to hold a gait.
3. Used for the wrong reasons or incorrectly can cause soft or hard tissue damage to the horse.
4. It is not uncommon to see psychological issues come into the behavior of a horse.

In teaching a horse to achieve and hold gait, the lessons are retained and hopefully a good working

relationship is established between horse and rider.

In the series of 4 photos below I will take you through some helpful applications using physical and mechanical aids with this horse. Keep in mind every horse is different and the same application may have to be altered or approached totally differently in developing the running walk. This is just one case and how I approached it.

The details on this horse are that she was presented at a clinic. She grabbed me immediately, not only do to her sheer size (16.1) but also her calm, confident presence, all eyes were on her. I was able to work with the fabulous mare for about 20 minutes. I worked her myself and others participating in the clinic also had the experience of a ride on her. She is 6 years old and when her owner rode around the arena at a flat walk she was striding big, walking loose and head shaking. In the structure of this horse I saw a horse beautifully structured with all the muscle to support the running walk. When this mare was moved up in to gait she went in and out of a hard pace to a stiff up headed stepping pace. The owner had been seeking much help over a period of time knowing she had the right horse and wanting the right gait she knew was in this mare. In seeking help from many sources over a long period of time the mare had been taken farther from the gait that she truly was genetically and structurally intended to do.

Please note that I am not using the stirrups for any other reason than that the saddle on this horse was much to large for me. It would not allow me the freedom to get the balanced and centered seat I would need to apply the physical aids I would need to help guide and support this mare. So they were dropped. The seat you ride will have a bearing on whether or not you are going help or interfere with the ability of a horse to carry its self and the weight of a rider and still be able to do the right gait.



Photo One

In photo One when finding this mare lost all the elements of looseness when moved up at speed, she actually lifted her head and neck while stiffening her entire body. Creating a ventroflexed back which can be seen in this photo, a back and frame of pace. In this photo I am testing the waters so to say and seeing if she will respond to dropping the head when asked and what her limits in response to bit pressure are. I have dropped and set my hands to bring the head down in hopes of raising the back.

I have also applied pressure to see if she would engage the hind quarters. I did get some response to both and she did not push back, but did not know to go where I was asking and remained stiff through the body. Notice the lateral set of legs moving together and the stiffness that has come into my body to ride this.



Photo Two

In photo Two I have stopped the horse and am just starting an exercise that I do to show a horse to drop its head and relax. Remember relaxing is part of the element of looseness. I am firmly massaging and pushing down on the neck. When the horse responds and drops the head I release and reward with a rub on the neck and verbal praise so a horse will know this is what I am asking.

The next phase of this is to ask this horse to do this at a dog walk while still pushing down and massaging. I am re-teaching a horse that has been taught it is not to go with a lower head, that is can. Also in this exercise the horse is learning to reach down for the bit, not to grab, hold and brace against the bit. The mouth must be re-educated as well.



Photo Three

In photo Three I am now working this horse to a shoulder out. The left rein is tightened just enough to see the corner of her eye, my left leg is applying pressure. I am asking for her to move away from that leg and give in to the bit pressure. My right leg is back farther, keeping the hindquarters from moving to far to center ring and still giving her a place to go away from the pressure applied on the right side, making the horse bend in the middle of her body.

My goal in this is teaching a horse to respond to different legs and mouth pressure while bending her body in hopes of suppling and softening her up. Also showing the mare that she can and it is ok to move other than stiff and forward. Notice I have set my hands lower asking for the head to come down and the back to come up. This picture is a bit blurred but you should be able to see the head tipped to the rail and right fore is crossing over the left fore and the right hind is stepping in front of the left hind.



Photo Four

Photo Four now shows the mare has increased her stride front and back compared to photo one. The mares back is much closer to being level. I am still setting my hands lower because this horse with so little time does not know how to carry and hold herself in this manner without support. Take note that I have also moved my legs back just a bit while applying and releasing pressure to get her to engage the hindquarters.

The mare now is rounded at the neck, collected on the bit and starting to lean into the gait instead of lifting up and stiffening. This mare is still to the lateral end of the gait but she has defiantly starting to time up and go in the direction of a wonderful running walk.

To re-teach this horse in the correct training situation. I would put her in a snaffle bit, do this work very slowly and teach a good dog walk, slow walk and moving out, head shaking flat walk. At this point a horse should be able to, hold them consistently and move up and down through them on command. One would also build on lots of bending and flexing exercises. A horse should be able to hold it's self with little support from the rider before asking for the running walk. A rider will find as the horse gets great at the flat walk and develops a rhythm the running walk will come out of the flat walk. A horse will get stronger to hold it with conditioning and the extension of the gait will start. This will take lots of time and work on the part of the horse and rider but the horse will know the gait and retain the use of it.

* I highly recommend using "*Working the Walk*" by Beverly Whittington as an aid to understanding and getting to a great walk with exercises to develop and strengthen the horse. Part one is featured in *The Gaited Horse Magazine*, fall issue 2001.

Closing Statement

My purpose in the above work was to provide you with a tool not just a piece of entertainment. This is a very vast piece of work and the intent was to give a good base of understanding. Also a guide to help with the confusion among those that are seeking help and knowledge of what the true running walk is in a naturally gaited horse, and last, a way to get you and your horses to the gait.

My intent is in the future to expand on this piece with different gaiting case scenarios and share what I continue to learn. Use this as a tool, re-read it many times, slowly and piece by piece. Look at lots of horses, start marking up still pictures, absorb, learn and you will find the mystery of the running walk disappear.