AN OWNER'S MANUAL FOR YOUR EQUINE INSPIRED DRESSAGE SADDLE

Serial # __ __ __ __ __ __ __ __ __ - __ __ **Date of Purchase __ __/__ __/__ __ __ __**

We highly recommend that you read through this manual before delivery of your saddle.

This manual will walk you through the issues you may encounter while riding in your new dressage saddle. There will be questions in bold print, followed by an explanation, and then a recommendation in red print.

The first comment we hear from clients when they ride in our saddles, is "different" – it should be. I'll explain.

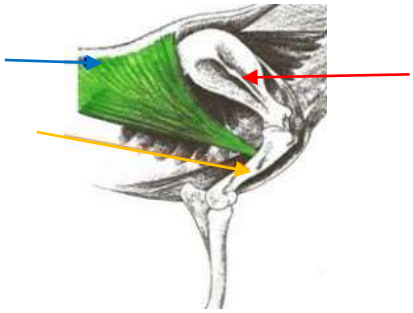
1.) The 1st difference was how we designed the saddle to allow the horse to move with the least amount of resistance represented by saddle and rider. This required different approaches for the diverse asymmetries represented by breed genetics, and/or conformation idiosyncrasies due to rider manipulation or a horse being forced to move with a lameness issue.
2.) The 2nd difference was how we designed the saddle to allow the rider, especially the female, to sit in a position that reflects relaxation to their horse, the ability to use their core strength, or what I refer to as their 'aerobic frame'. Here I had to look at the diverse genetic traits of the female anatomy; lordosis (inward-curvature of the spine), the height of the pelvis, the distance between the ischial tuberosities (sitting bones), openness of the pelvis, arc of the ischium (bottom of the pelvis making contact in the seat of the saddle), upper-to-lower leg length disparity, and other asymmetries that may have been caused by child-birth, an injury; coccyx (tailbone) protrusion, pelvis fracture, etc.
3.) The 3rd difference is how we fit our saddles to a horse – which is much more complex and unfortunately controversial in the States (readily accepted in Europe). That is fitting the saddle for the asymmetrical build of the horse – which by the way is 99% of all horses. This may take into consideration the passive hock, the development of compensating muscles not required for dressage.

    Our saddle-fitters are instructed to address those idiosyncrasies of individual horses, to make them track evenly, thereby allowing symmetrical muscular development while atrophying compensating muscles, taking pressure off ligaments and tendons that have developed laxity due to compromised mobility. The importance here, is that once the entire muscular/skeletal system is balanced correctly, the horse can easily carry the weight of the rider evenly on all quarters. The horse won't need to have joints injected, special trimming or shoeing, and will become much more athletic using the entire hindquarters, instead of just one side.

IMPORTANT -When the saddle was delivered, there had to be some major differences in the way your horse moved; with less contact of your saddle on the sensitive thoracic trapezes, wither muscle, your horse was able to experience more freedom of movement of their scapulas, shoulder blades.

When a horse has that ability to move in a more natural frame, not only will the motion of the shoulders improve, but if the fore-quarters have more movement, the hind-quarters will also have that same reflective freedom-of-movement. To achieve that greater degree of stifle/hock motion, will require your horse to have more activation of their abdominal muscles. And because we always adjust your saddle to address your horse's asymmetry, and bridge the saddle to allow your horse's back to rise with the activation of their abdominal muscles, there will be a completely different gait – an analogy here is that if you had been accustomed to your horse doing a polka, you will now find your horse moving bigger but slower – the waltz. - This is the beginning of a horse becoming a back-mover.

This sketch is showing the right-forequarter of a horse.
The blue arrow is pointing to the latissimus dorsa.
The orange arrow is pointing to the humerus, or upper-arm.
The red arrow is pointing to the scapula or shoulder blade.



Now you would think that this would be a good thing, however if your horse has always been ridden in a saddle that is a short tree-point saddle, forcing the saddle to sit on the sensitive thoracic trapezes, and a tree that is configured in such a way to always create full-panel contact (the banana tree), your horse mostly likely moved, to certain degree, in what we call a leg-mover. This unfortunately is how 90% of the dressage horses in the U.S. are not only ridden in that frame, they are also trained, shown, and even judged with that compensating movement.

What you will notice, in about a month, sometimes even after a few rides, your saddle will seem to be too wide forcing it to sit lower on your horse's wither. This is because with the increased movement of the scapulas, there will be a full-range of motion of the back's latissimus dorsa. With that energy, your horse will start to develop strength thereby repositioning not only the humerus, but also the position of the scapulas, – so it is not the saddle that has widened, it is because your horse has narrowed, or what Dr. Deb Bennett coined many years ago, "coming-up-in-the-withers"

If that has taken place, you are going to have to purchase a correction pad system that allows you to add shims to the pommel area until I can return to narrow the tree. We have those in stock.

[If you or anyone you know has never experienced their horse to narrow at the withers, it is because a banana tree saddle never needs to be readjusted –with a tree that has full-panel contact, the shape of that tree dictates those horses to go middle-back-hollow, therefore the horse never develops the correct musculature to do dressage correctly]

In the beginning, because you will not only find your position less restrictive and possibly a feeling of less secure, we recommend that you only walk your horse for the 1st 5-10 rides with an occasional rising trot.

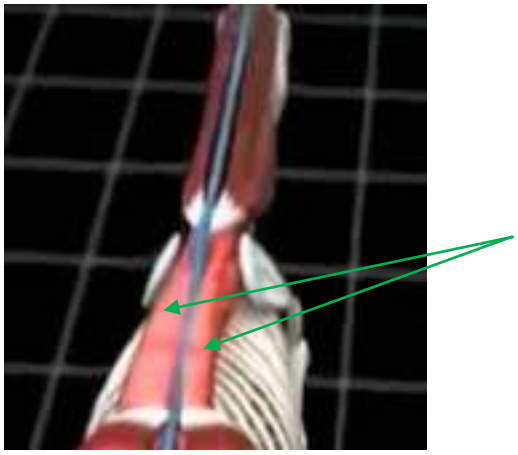
This is not only important for your position that will change from the inability to grip with your knees, activate your quadriceps and adductor muscle groups, it is very important that this slower muscle-building gait be used to not only strengthen your horse's passive side, but also relax the over-developed active side.

So please:

Don't over-work your horse in this readjustment period.

Don't take a lesson – a trainer has their own agenda which can be counter-productive to the health of your horse during this muscle building stage. A passive hock that is now being asked to work, not only has to build the strength to accomplish that increased movement, but the supporting collateral and cruciate ligaments supporting those joints, need to build the elasticity for that increased range-of-motion.

Don't do any sitting-trot – it is that gait that will totally destroy the muscle groups that the working walk has built. Once the top-line muscle group, longissimus dorsi is properly developed, not only will the sitting trot be a lot easier for both horse and rider, that shorter frame will make the collected gaits a lot easier…throughness.

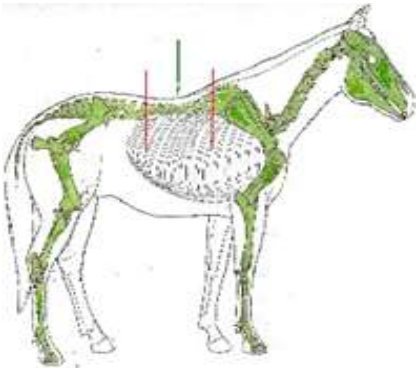


Longissimus dorsa – the muscle group required for engaging the hind-quarters, achieving a 'back-mover', throughness, sway of the ribcage, or what the German's call 'Schwung'.

As for the construction of our saddles, we have contracted Frank Baines Saddlery, Walsall England to complete that undertaking. Frank Baines without a doubt is the best Saddlery that we have ever worked with, and that is a list of at least 20 other Saddlerys that often made saddles for us, where they used inferior craftsmanship and/or materials.

To understand where you are with our saddle, we have to make a comparison of what you were riding in before. Although I regret naming the brands of saddles, it does become necessary to give you the insights of what changes will be taking place riding in our saddle during this reconstructive phase of training.

First, the saddle should sit on the horse's back, right behind the shoulder, with panel contact on all the thoracic vertebra (vertebra with ribs) which would be the 8th through the 18th. The center of the saddle would then be considered to be thoracic vertebra 13, as shown below on the left sketch (next page) - for future reference, this is T-13. For the Arab, or horses and ponies with an Arab genetic trait, the center of the saddle will be slightly more forward.




The rider in the upper right picture, is sitting in that much preferred position of relaxation, where the horse doesn't have to make any compensations to carry her weight, and the rider can sit in a position where she can comfortably use her core strength to represent 'live-weight' to her horse and easily communicate her aids.


The rider upper left is Nicole Uphoff and her famous horse, Rembrandt. Here she is riding in a Passier PSL, a T-15 saddle (two vertebra back from the center of the back) with a medium seat and medium twist. Although Nicole was successful by winning two Olympic Gold Medals at the 1988 & 1992 Olympics in this saddle, by easily maintaining a shoulder-hip-heel position it was mainly because of her long balanced legs, straight back, and an ability to ride like a man with very little ischial contact. So for men and women built like men, this is a saddle that will work for those body types.

Although the Passier was suited for Nicole's build, most women found the PSL and later 'Nicole' saddle, had a seat that was too narrow, the twist was too wide, and almost all women were placed in a 'chair seat', as shown by the rider on the picture on the upper-right - the 'water skier', winds up cantilevering their weight over the lumbar of the horse, and hanging on to the horse's mouth for balance. For those riders making the transition to our saddle, will feel a sense of insecurity, since accustomed to bracing between the cantle and thigh-blocks – this is a major compensation that needs to be corrected for the health of the horse.



The 3 pictures on the bottom of the previous page, is the T-14 or 'standard' dressage saddle – It could be an Albion, Balance, Black Country, County, Custom, Hulsebos, JRD, Stubben, Spirig, Trilogy, Verhan, or one of many stock saddles, that are often assembly-line made. This saddle can work for a lot of riders, but for some, there needs to be a conscious awareness of using their core strength to maintain a position that seldom reflects relaxation to their horse, and an ability to communicate their aids. Unless a rider has a naturally straight back, short pelvis, balanced upper-to-lower leg disparities, most women will find it very difficult to ride in their relaxed aerobic frame. When women with genetic traits that have more feminine traits; lordosis, taller pelvis, longer ischium, wider distance between their ischial tubersoties, uneven upper-to-lower-leg disparities, a saddle with different reference locations of the seat/twist/stirrup-bar ratios, has to match those physical anomalies, to allow those women to ride in a natural shoulder-hip-heel position.

Although most T-14 saddles can be very comfortable for the rider, they are seldom allow the horse to correctly develop the musculature to compete in the upper-levels of dressage.

For the Arabian shown in the center picture, previous page, and other short back horses, the T-14 saddle can be extremely uncomfortable for the horse. In addition to having a short back, they are almost always smaller horses to their Warmblood counterparts, and therefore are more susceptible to 'kissing spine' or forced to make other compensations such as bracing on the neck's under muscle, brachiocephalicus, the lama look, flattening their pelvis, which creates a straighter femur, causing stifle and hock issues.

The T-14 saddle ridden by an accomplished FEI rider, in the right picture, previous page, is also showing signs of compensation. Moving slightly middle-back hollow, the rider is having to use her abdominal strength to maintain a forward position, which exaggerates her lordotic lumbar.

Although riders feel more secure in the T-14 saddle, and will find them very comfortable, almost all have a certain degree of what is referred to as a banana tree. This unfortunate structure will not allow the horse to physically develop the musculature required to **correctly** perform the upper-levels of dressage, by working from the hind-quarters forward. Instead, the middle-back hollow horse is forced to move from the rider's seat forward, with little regard to what is happening behind them – the 'leg mover'.

Notice how the openness of the fore, on this supposedly accomplished FEI horse on the above left picture, does not match that horse's hind quarters – the leg mover. And compared to the balanced openness of the rear and fore on a correctly moving 2nd level horse, on the picture above right, this horse is moving in a relaxed balanced frame – the back mover.

In fact, that middle-back hollow horse on the left, previous page, is beginning to look a lot like a horse moving in a different discipline, as shown in the middle picture – the Saddleseat horse.

The saddles mentioned above, have one major fault, in that instead of the back of the horse dictating the shape of the tree used to build a saddle, they do just the opposite; **dictate the shape of the horse's back**, not to mention that none of those saddles allow most women to ride in a shoulder-hip-heel position.

This is the position of a rider in our 2008 model, is a T-13, which allows the rider to sit in a centered shoulder-hip-heel position. This is the first saddle that offers the rider a position of relaxation and a position where aids can be communicated without having to make bodily compensations. Notice that the movement is derived from the horse's hindquarters, and not manipulated, as indicated by the loose reins. It is a good saddle that can work affectively for men and some women with a slight amount of lordosis/tipped pelvis, but for women with mild or severe lordosis, those women will need to make bodily compensations – the Hennig and Schleese saddles with extended stirrup-bars are in this category.

This is a T-12 saddle, which is known for allowing the horse to have maximum use of their hind-quarters – notice the rider's position is closer to the shoulder. This is the same position you will find in our 2012 and newer T-12 saddles. This is the frame every dressage horse not only needs to be successful in carrying the weight of the rider, but once the engine of the horse is developed, as with this massive muscular hindquarters, every upper-level movement can be easily achieved. Although this is a Warmblood, there is no reason that any breed of horse can't achieve this muscular development.

CHANGES YOU WILL ENCOUNTER WITH YOUR SADDLE.

Often times our saddles are sold to advanced riders to get the 'edge' - a more balanced piaffe/passage, easier changes, or just a better leg position. I often hear comments that refer to 'natural', 'close to the horse', or other positive statements that allow them to immediately have a more comfortable position, and a horse that can move a lot freer. However, then there are the riders that have always been struggling with position, or have a horse that has been hard to correctly muscle. With those riders, the transition to our saddles will radically change your position, and often times allow your horse to move completely different. Those two positive conditions would seem to be a welcome change, but for a few people, there may be some problems. The following are some of the questions that I have heard, and my recommendations until the rider finds their balanced position, and/or the horse starts to muscle correctly.

To start with, the design of the gullet plate will make your horse move with more freedom with their shoulders. This is accomplished by the design of the plate to put less pressure on the thoracic trapezes, wither muscle.

That ability to increase the 'range of motion' of the scapulas, will also have the same effect on the opening of the humerus, upper fore leg. It is that opening that is responsible for developing the strength of the latissimus dorsi – and the strength of that muscle, is extremely important, and really worth your time to understand what a strong latissimus dorsi will do for your horse.

First - The basics of developing strength through muscular development

In the picture to the left, is a woman doing a 'curl'. If she were too slowly lift the weight in her right hand to the same position of the weight in her left hand, that would be the 'full-range-of- motion' required to correctly build her bicep. If she were too slowly lower the weight in her left hand, to the position of her right hand, she would equally be using the same 'full-range-of-motion', required to develop her triceps. The importance here is twofold; the first is to build the strength of those two muscle groups, but more importantly is the interaction of those two muscle groups is to achieve a balanced movement. This interaction of opposing muscles can be likened to the development of the muscular frame of the horse; hamstrings, versus the quadriceps, abdominals, versus the longissimus dorsi (back muscles) – "When one body exerts a force on a second body, the second body simultaneously exerts a force equal in magnitude and opposite in direction to that of the first body" - Isaac Newton

BUILDING THE CORRECT MUSCULATURE

Now that you have a saddle correctly designed and fitted, it would be nice to now have the opportunity to perhaps back-up in your training, and start from the beginning, by using the basic 3 principles of building the correct musculature required for performing dressage correctly.

1.) Get the horse off the fore.
2.) Get the horse under from behind.
3.) Get the back of the horse up.

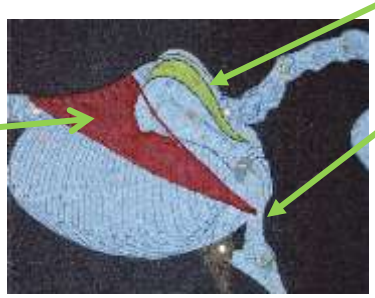
Step 1. Developing the Latissimus Dorsi

Question: "AFTER RIDING FOR A FEW WEEKS, WHY DOES THE SADDLE TREE SEEM TO BE TOO WIDE?" OR, "WHY IS MY SADDLE NOW SITTING ON MY HORSE'S WITHER?"

A couple of reasons: Hopefully you were able to ride in the saddle when it was delivered, so that some of the wool could compress, allowing us to re-flock it once more before we left. Secondly, riding in our saddles allows horses to make some radical muscular/skeletal changes.

'Coming-up-the-wither'. Dr. Deb Bennett came up with that expression a long time ago, to describe the development of a dressage horse. Although this is a basic change a horse goes through as it becomes stronger, it is very complex to explain and harder to understand, even by experienced trainers and veterinarians, and what makes it more controversial, almost all stock saddles that have short gullet plates and panels set high in the pommel, 'banana tree', never allow a horse to make this change.

Latissimus dorsi (shown in red)



Scapula – shown in yellow in a static frame, in white, as the horse moves forward.

Humerus – upper arm. The latissimus dorsi is inserted in approximately the center of the humerus. Its purpose is to support the position of the humerus – with a full range of motion, the stronger that muscle will become - the stronger the muscle, the more vertical the humerus will be positioned – "coming up in the wither".

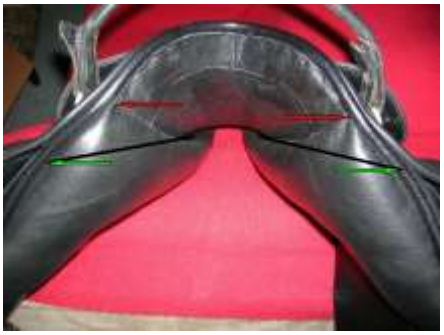
In the above sketch, the latissimus dorsi (red area), shown moving with a 'full-range of motion', required when correctly moving forward. As this horse is moving forward by opening its humerus, the resultant energy, causes the scapula to move back, as shown from the yellow placement to the white placement. Each time the horse is allowed to open its humerus, by moving bigger on the fore, the full-range of motion strengthens that important muscle group. With correct motion, of the **walk,** and with repetition, the placement of the humerus

will be placed in a more upward position, making the scapula placement further back, or what Dr. Deb Bennett calls, “Coming up in the withers”.

But, if the tree of the saddle blocks the natural movement of the scapulas, the horse can’t correctly open their humerus, which will prevent the development of the latissimus dorsi, causing the horse to pace, and prevent the horse form coming off the fore – this is an issue with almost all T-14 and T-15 saddles.

However, a horse coming up in the wither, will also be coming further under behind – ‘good thing/bad thing’. As the horse transfers more energy to the rear-quarters, the rider may experience a more uphill horse placing the rider ‘behind-the-motion’ – give us a call, we have to readjust the saddle for the positive changes.

The development of the latissimus dorsi by using a full-range of motion, especially at the walk, can’t be overly emphasized; because it is not only the muscle group that gets the horse off the fore, but in doing so, it shifts the energy of the horse to hind quarters, which is the prelude to engagement, required for the collected gaits. However, this can be a double-edged sword; once the energy is shifted back to the hind-quarters, and the horse is capable of performing the passage, piaffe and pirouette, it is the lack of true forward in the upper-level tests, that actually atrophies that important muscle group – hence, a reason so many FEI horses most difficult gait, is the ‘free walk on a long rein’.



What makes our saddles different? The two red arrows are pointing to the location where 99% of all Saddlerys connect their panels – creating the banana tree, or make the saddle sit ‘on top of the horse’. The two green arrows, are pointing to the location where we attach our panels. This not only makes the gullet wider, but it also prevents the saddle from sitting on the sensitive thoracic trapezes, wither muscle, allowing the saddle to ‘sit into the horse’.

Example: Tom Noone, one of the better riders in the U.S., had a horse in training named ‘Inky’. In 2009 I sold and fitted that horse with a very wide tree saddle. As the months went by, that gelding became more athletic and narrower in the wither, so much now, that I have had to narrow the tree many times, and add air panels because that horse has actually developed deep shoulder holes. In other words, that horse has gone from needing a wide tree, to now requiring an extra narrow tree as he has developed into one of the best upper-level horses in the U.S.

The saddles we sell are equipped with a very strong gullet plates that have to be narrowed over time. In fact, we seldom have had to widen one of our saddles, which is a testament to Dr. Deb's saying, 'coming up in the wither' - it just happens.

Until we can return to readjust the saddle, you may have to ride in the now popular correction fleece pads, e/w shims that would allow you to build the horse's wither up to fit the saddle. Over time, those adjustments will not be necessary as the horse settles into their upper-level frame. – **We have developed a very thin, durable shim pad that we sell for $125 – if we can't get there in a short period of time, send us a description of your problem with pictures, and we will make up a shim pad and send it to you.**

Step 2. Developing the articulation of the pelvis.

"WHY AM I NOW SITTING BEHIND THE MOTION?"

In addition to the horse narrowing at the wither, with the ability of the horse to move their shoulders with freedom, allows the horse to come 'up in the wither' and at the same time, allows the horse to come 'under from behind'. So what once what a downhill horse, can very likely create an 'uphill horse'.

Again, the correction pad e/w shims, allows the rider to balance the saddle by adding shims to the cantle (rear of the saddle), until we can return to reflock the saddle for the uphill change in your horse.

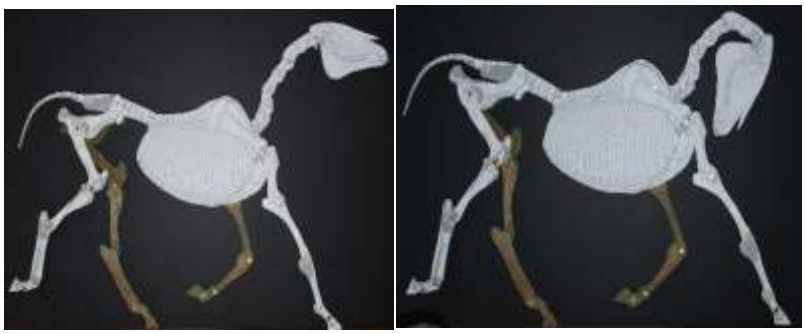
Question: "WHY AM I FEELING WOOBLY IN MY SADDLE?"

It is not you, but a reflection of your horse's energy. A horse that has had a saddle that dictated the horse to move middle-hollow (long frame), and work on the fore, seldom has any mobility in their trunk (core). With the rib cage stationary, the horse can become very easy to ride, but seldom has the ability to work from behind. Once the saddle allows the horse to use their rib cage to raise their back, and the saddle is fitted to address the horse's asymmetry, not only will the spine have the ability for vertical flexion, but also lateral flexion, or the 'Gumby' feeling. However, until the top-line muscles are correctly developed to carry the weight of the rider, and the stability of the horse to work from the hind-quarters forward, that feeling will exist – hence, the importance to do most of your muscle-building at the walk – with diligence and patience, that phase can happen very quickly.

The German word 'Schwung', does not have an English translation, rather, it has volumes of detail on how a dressage horse should move; It is a term describing the freeness of a horse's back during the walk...it's swing...involving the engagement of the haunches, the throughness of the hindquarters to the circle of energy...the horse's spine should be free, flexible, energetic, with the horse in balance and using its hindquarters and reaching up under itself with purpose, yet all of this with relaxation – without a strong top-line, none of that can correctly occur.

During the 2012 Summer Olympics in London, I couldn't believe that there were only a few horses that moved with 'Schwung'. Very discouraging, yet perhaps it was a wake-up call for not only the U.S. team, but for others teams throughout the World that had their butts handed to them by the Brits.

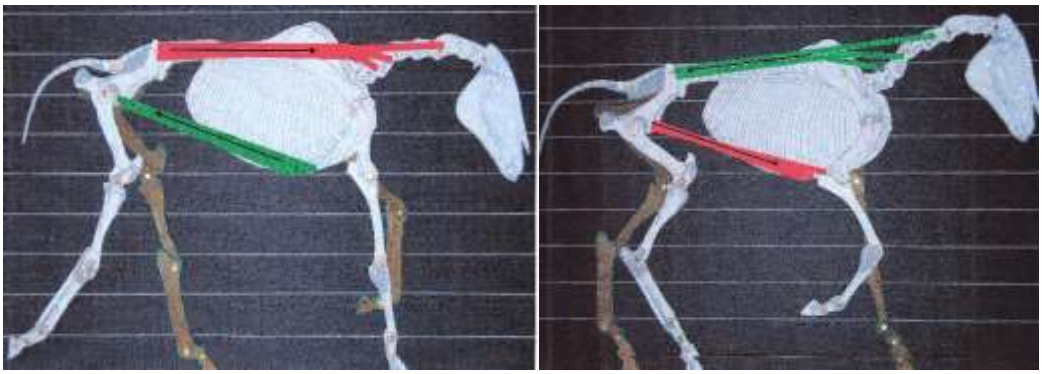
The longissimus dorsi is best developed at the walk (The Mother of all Gaits), without any manipulation of the rider's contact in the reins. Allow the horse to move forward with purpose, and let them find their balance. Once the strength of the back is achieved, the horse will seek its own contact, and the misnomer 'on the bit' will actually occur without the rider getting in the way.



A term we hear more and more these days is Rollkur, or hyperflexion of the neck. In the sketch to the left, is a horse going middle-back-hollow. This is usually a product of a horse that has no top-line (lack of longissimus dorsi), which can be caused by lack of proper exercise, a rider who feels the need to manipulate their horse into a false frame, or it can be caused by an ill-fitting saddle placing the horse into submission. However, instead of backing up and developing the top-line with patience, the rider further manipulates the horse with the use of side-reins, draw-reins, or excessive rein contact - 'manipulation'. This not only prevents the horse from carrying the weight of the rider comfortably, it also places the horse in a frame where the spinal cord is compromised, which can cause a cervical, thoracic and/or a lumbar vertebra impingement, which may force the horse to buck, rear, bolt, and can also lead to 'kissing spine'.

There is a better way.

Step 3. Developing the strength of the Longissimus Dorsi – The Top-Line muscle group



The longissimus dorsi (red area on the back of the horse) can only be developed by allowing two energies to take place. In the sketch to the left, the left-hind is in the propulsion stage of forward. The back comes up, the head is allowed to drop, shortening the length of the longissimus dorsi, thereby flattening the pelvis. As the left-hind goes into the retraction phase, on the right sketch, or stepping forward motion, the horse's frame actually shortens, as the abdominal muscles (shown in red) tighten, closing the pelvis, which in turn draws the longissimus back, thereby raising the horse's head – or what is known as the muscle building, 'full-range of motion'.

As you can see, if the rider gets in the way of the horse naturally bobbing its head with the motion of the gait, by applying excessive contact, or manipulation with side or draw reins, not only does that have a negative effect of the motion of the pelvis, but the possibility of developing the top-line, is almost impossible.

Therefore, to correctly develop the strength of the longissimus dorsi, or the top-line, to affectively carry the weight of the rider, the horse has to have Schwung, or the ability of “freeness” of movement – that would be the closing of the pelvis, the bobbing of the head, the rise of the back, and the interaction between the abdominal and longissimus dorsi.

As shown in the above picture, when the horse requires more rein to rebalance its frame in a difficult movement like the pirouette, the rider has to first have the ability to maintain an aerobic frame, the saddle has to have the correct amount of bridging, to allow activation of the horse’s abdominal muscles to raise the back, and have the rider understand that excessive contact is not always necessary, as shown by the loose reins, while the horse is achieving the movement from their hindquarters. In other words, give the aid, and then allow the horse to find his own balance, as the rider is doing in the above picture, while performing this demanding movement with relaxation.

Question: "My horse has developed 'dry-spots' behind the wither.

Very controversial, yet when I see horses that don't have dry spots, it is an indication that the saddle is restricting the movement of the shoulder blades, and the horse will therefore be pacey in their gaits and will usually be camped under because of the lack of latissimus dorsi.

Great! That means the shoulders are moving. That 'dry-spot' should look like a wedge right behind the shoulder – the longer the wedge the more shoulder movement you will have. If you think about it, the rest of the saddle is sitting on areas of static movement. On the other hand, the movement of the scapulas is not just back with the opening of the humerus, it also has an inward movement which indicates an area where there will not be panel contact, hence dry spots.

Along those lines – "What should my saddle pad look like after riding?"


Another misconception – I have heard trainers and even Veterinarians complain that there are not equal sweat marks along the panel contact of the saddle pad. If the saddle pad sweat marks do indeed show equal sweat marks from front to back, on the picture to the right, the saddle is dictating the shape of the horse's back, resulting in a horse incapable of using their back, or what is commonly known as the 'Leg-Mover'

Explanation: The fundamental mechanical movement of the horse working correctly, is that with the activity of the horse's abdominal muscles, the pelvis of the horse will close, articulation. With that energy, the top-line muscle group, longissimus dorsi, has to activate, or shorten its path to the horse's poll – what we seldom see in the United States, the 'Back-Mover' – one only has to watch International competition like the Olympics, to see our riders can't compete with their European counterparts.

With the saddle pad on the leftm at the top of this page, there seems to be only a small amount of contact in the center of the saddle pad, which indicates that this horse is reaching for the saddle and all the mechanical movements are taking place; activation of the abdominals, articulation of the pelvis, rise of the back, and resultant relaxation of poll and jaw 'Schwung", the 'Back Mover".

However, if you don't see any contact in the middle of the saddle pad's sweat pattern, the saddle is either too narrow, or excessively bridging – that is a problem.

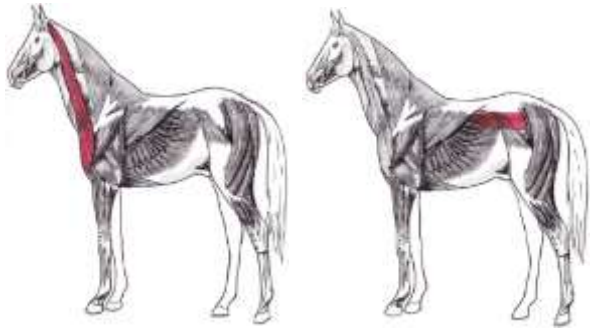
If there is more contact one one side than the other, the rider is sitting harder on one sitting bone, ischial tuberosity, and the horse will have to make lateral compensations to carry the weight of the rider in an unbalanced frame. Also very bad – see asymmetrical reflocking'.

Question: "My horse feels like he is always going to poop", or "I think he is about to buck",

For those riders that are making a transition from a T-14 or T-15 saddle to our saddle, I often hear these and many other comments about the horse's back lifted into the saddle. These comments are not just from novice riders, but also accomplished rider's that for the first time actually felt the natural biomechanical movement of their horse, which is something they should feel with each and every stride the horse makes. The requirement of the back coming up, is the combination of the closing of the pelvis, by the reflective activation of the horse's abdominals.

For the rider that feels the sway of the ribcage or the horse coming up in the back for the first time, especially if they have always ridden in a saddle that dictated their horse to move middle-back hollow, this correct muscle building movement, will become the new norm. I strongly recommend that you and your horse get used to that balance at the walk first – if it seems different to you, it will also feel different to your horse.

"WHY DOES MY HORSE SEEM TO BE SORE AFTER RIDING?"



When we perform a consultation before either a saddle-fitting or ordering a saddle, we always point out the correct and compensating muscles groups. Two muscle groups that we often see over-developed, usually on the stiff-side, are the brachiocephalicus, upper left, neck's under-muscle, and Ilocostalis, upper right, false top-line muscle.

Those two muscle groups are almost always found with a horse with an asymmetrical frame, which is 99% of all horses, ridden in a symmetrical saddle – which unfortunately is even subscribed to by almost all saddle-fitting certifications.

We do things differently – our main focus is to give the rider a position that reflects 'straightness' to their horse, which in turn prevents compensating musculature development.

Depending on how much your horse has been forced to compensate in a bracing frame, will depend on how sore your horse will become. Now having to work in the correct frame, I find even supposedly upper-level horses that have developed so much compensating musculature of the ilocostalis, false top-line muscle group,

instead of the longissimus dorsa, top-line muscle group, that the horse is required to use their abdominals in a movement like the pirouette, they simply can't get into a closed frame to accomplish that movement correctly

In working with a lot of accomplished upper-level riders, I often see tremendously muscular horses (athletes) that don't require veterinarian or chiropractic care, such as injecting hocks, or making skeletal adjustments due to a horse made to work in a compensating frame. This is not to say I don't believe those services are necessary, but I do know from experience, that when a horse is ridden in a relaxed frame, asked to work within their physical capabilities, they will develop a strong correct frame in a shorter period of time, than if they were pushed beyond their physical limitations.

In short, at first you may want to work for a shorter period of time, until the weaker muscles on the passive side that are now required to work correctly, responsible for gaining the strength required for your horse to develop beyond self-carriage. This will also allow the cruciate and collateral ligaments that had developed laxity due to working in the oblique, or 3 tracking on the passive side, needs those supporting components stabilized. So until the passive side muscles build the correct strength, the compensating muscles atrophy, and the supporting tendons and ligaments gain stability, ask less, work in a 20 meter circle which will allow both you and your horse to gain balance and strength – this may only take 5-10 rides.

WHY DOES THE SADDLE BOUNCE ON THE BACK OF THE HORSE WHEN I LUNGE?

This is actually a good thing – when a horse has been going middle back-hollow, because of a banana tree, or a centered billeting system, which prevents a horse from using their backs, the back of the horse seldom has a place to rise.

There are some Saddlerys that always use a billeting system that has their billets attach to the center of the saddle, as shown in red. By pulling the center of the saddle downward, the horse seldom has the ability to raise their backs, which does prevent the saddle from bouncing, but the 'big picture' is that those horses never develop a top-line muscle group, and are always working out behind. The 'V' billeting system and point billet system, shown in green, allows the center of the saddle to raise, especially in the vertical movement of a correct pirouette.
Also notice that those saddles with the center billeting systems require an off-set girth to get the proper placement to sit on the sternum of the horse – this is just one of the saddle industry's way of addressing the 'result' of a problem, instead of working on the 'cause' of the problem.

So instead, of making a horse plow around in what I call a 'long frame', with their pelvis flattened and no undulation between the abdominal and back muscles, our trees, attachment of panels, and billeting system, will allow the back of the horse to have a 'cat-like' back, that sometimes allows the middle of the back to be higher than the wither. When either the normal back or 'cat-like back' horse lifts their backs and fills the bridged area of the saddle, I would expect the back of the saddle to come off the horse.

WHY AM I SORE AFTER RIDING?

A number of things here. The first thing you might encounter is sore psoas and hip-flexor muscles that hadn't been used in other saddles where a rider had always been using their quadriceps and adductors to support your upper-torso.

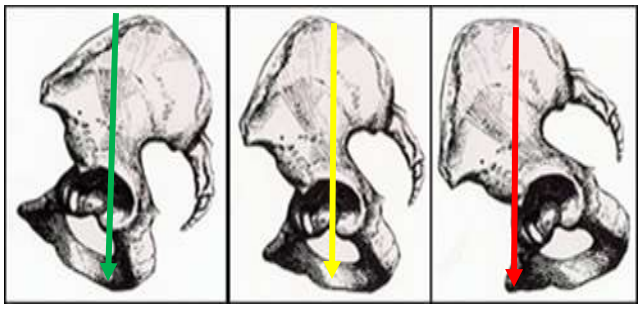
[Take magnesium & potassium the first few days, to alleviate leg cramp.]

When riding in that shoulder-hip-heel position, if you are not accustomed to riding in that position, your quadriceps (upper-thigh) won't be a 'support' muscle group, rather they will be a 'demand', muscle group as it was designed – without the ability to tighten them and ride off your knees, they won't be constantly activated, and will simply…go away.]

Another comment I hear, is that women will get a side ache from the increased undulation of their horse's reflective interaction between their abdominal and back muscles – great! A horse with a weak top-line, will be like riding on a trampoline, but as the longissimus dorsi strengthens, their energy becomes less 'bouncy' and your undulation will also become less active.

Perhaps the biggest complaint I get, is that the rider who at first didn't have any back soreness, with time, riding became painful.

When our saddle-fitters first adjusted your stirrup-bars for your position, we try to adjust your pelvis for the natural curvature in your lower spine (lordosis) – this is your aerobic frame.



In the drawing above, the pelvis on the left is either a male's or a woman with a naturally straight back and no lordosis/tipped-pelvis. The center pelvis, is where we find 90% of women; mild lordosis/slightly tipped pelvis. And the pelvis to the right is the lordotic pelvis, or women with severe lordosis/tipped pelvis, women of African and Mediterranean lineage.

This is where it gets complex. There are a lot of trainers that are constantly trying to get their clients to 'ride like me'. When some trainers see a woman with a protruding buttocks and natural inward curvature of the spine in the saddle, they will require them to flatten their backs, causing their shoulders to move forward, look down, tighten their quadriceps and start a long list of compensations that will affect the mobility of horse and rider. However, this unnatural spinal position can have a very negative affect on the rider's back.

When a spine is purposely put in a compensating position, as shown with this woman's natural lordotic frame, in the above, and was forced to ride in that awkward compensating frame, she placed herself in a position that caused a very painful inward herniated disc., as shown by the red arrow in the above CAT scan on the left and X-ray on the right. Simply put, you are individually genetically engineered to be built in a specific frame – you can strengthen it with exercise, but to modify it, can have lasting negative consequences.

However, if you are riding in your natural frame, and the pain has increased over time, then there are changes that are taking place; if your horse is coming up in the wither, as it should be, the wither may be narrowing, causing the rider to be pitched forward, which may result in an impingement in your lumbar – here you will need to use a correction pad e/w shims, or other thicker pad in the pommel area to widened the wither, for your horse to fit the saddle, until we can get there to readjust your saddle. Or, as your psoas, hip-flexors, quadriceps and abductors all relax, this may also tip you into the pommel causing lower back problems – this will require you to adjust your stirrup-bars which will be covered in the next section.

"WHY DOES THE SADDLE SEEM TO BE FALLING TO ONE SIDE?"

If that hadn't happened to your old saddle, it is now because the horse is moving more under themselves, with their hind legs. When I adjusted your saddle, I accounted for your horse's asymmetrical build, forcing you to sit more centered. This can be a "good thing/bad thing", in that with more active, balanced hind-quarters, the energy should be somewhat even right to left, and left to right, instead of you always sitting on one side of the saddle. However, even if I have made you sit centered, the horse is still going to be stronger on one side, and have less movement on the weaker side. Until the weaker side gains the strength to match the stronger side, you still have that sensation of falling into the weaker side of the horse. This uneven fish-tailing can be very discouraging, but as time goes by, will actually force you to place more weight on the weaker side and develop more musculature there. As that musculature develops, the saddle will need to be readjusted to take care of the different asymmetries during that transition.

For a short-time fix, there are a number of correction saddle pads that have shims to build up the weaker cantle side of the saddle temporarily, until I can return to make that adjustment. Good news, this is usually a short time problem, and can almost always be corrected with one adjustment.

If you notice that all the questions we receive, have to deal with the progression of building the correct musculature of the horse, and resultant changes the horse has made:

"Saddle falling on the wither" – resulting in the wither narrowing – development of the latissimus dorsi

"Rider sitting behind the motion" – with the horse coming off the fore, the hind-quarters rotate under -
- articulation of the pelvis.

"Saddle bouncing on back when lunged" – activation of the abdominals and rise of the back – development of the top-line muscle group, longissimus dorsi.

"My horse seems sore" – developing the strength of the atrophied passive side – developing straightness by equal musculature of the hindquarter muscle groups; gluteus, hamstrings, quadriceps, etc.

"I feel sore after riding" – when a horse starts to move their core correctly; undulation and sway of the ribcage, that reflective energy is going to put the rider in that same aerobic frame.

ANOTHER AGENDA

"MY TRAINER DOESN'T LIKE MY POSITION IN THIS SADDLE"

We sometimes find ourselves in the middle of a situation with our clients and their trainers. Sometimes we hear that trainers want their clients to have a 'driving seat' – our saddles won't work for that '1970' long-frame, hollow-back, leg-mover frame. They don't like to see their clients ride in their natural aerobic frame – instead, they want their clients to "ride like me" – forcing you into a compensating frame that leaves you prone to lumbar herniation's?? – makes no sense. Or they will say, "All my clients must ride in the same saddle", which really means, their financial gain, by their sponsor, is more important than you being able to ride in your aerobic frame.

The picture at the bottom of previous page is Tom Noone, Ila & me during a consultation

This is the frustrating part of my job - in almost all those cases, that particular trainer was not around during the saddle-fitting consultation, yet after the saddle has been delivered and fitted, they now become so concerned about their clients position. In the stables where I have been working with a lot of clients, we often take the team approach; I not only get to work with the trainer, but also the Veterinarian, Chiropractor, Massage Therapist, Ferrier or anyone else that can give me some feedback about both horse and rider - Our goal as a team, is to benefit you as the rider, and your horse as an athlete. Another comment I sometimes get is, is the trainer that states, “I can’t ride in your new saddle” - and yes, that saddle was not made for them – simply move the stirrup-bars fully forward, for either male trainers or those female trainers built like men.

CONDITIONING YOUR SADDLE

I use many types of leather when building a saddle: 'Italian leather', a misnomer, which is very soft and almost feels broken in on your first ride; durable elk, or smooth buffalo hide for riders who spend long hours in the saddle (requiring more conditioning before having that 'close to the horse' feeling); or for the basic introductory saddle, 'German leather', another misnomer, which requires a lot of conditioning, but nevertheless, allows the rider an excellent entry into world of your desired discipline. When first beginning the conditioning process, I recommend the use of Lederbalsam, a beeswax product, sold by Passier, Stubben and other Saddlerys. Clean the saddle with water removing any sweat and dirt, then spread the conditioner on the complete saddle. Complete this step after the first 10 rides, and then condition as needed. If this step is completed correctly, the saddle will have a soft supple feel, and have that wrap- around the horse feeling, instead of being stiff and unresponsive to your leg.

Once the saddle molds to the horse's back, there are a lot of other products that will keep the saddle clean and conditioned. However, use soap and glycerin sparingly, because although these products will clean stubborn dirt, they also will remove the moisture from the leather, and can actually dry the leather to a point it can tear.

ADJUSTING THE FIVE POSITION ADJUSTATABLE STIRRUP-BAR

Your saddle is equipped with adjustable stirrup-bars that allow you to not only adjust your frame for a shoulder-hip-position, but also equalize the pressure on your ischial tubersoties (sitting-bones). These stirrup-bars work on the principle of a cantilever; one-hole adjustment, or approximately three-eighths, of an inch at the base, equates to as much as 3 inches of position movement at the shoulder, depending on that distance from the rider’s sitting-bones to their shoulders. The adjustment has to also coincide with the length of the leathers. There are some women that feel that shorter leathers gives them more security than those that are longer. However, by shortening the leathers, you are also activating your quadriceps that in turn will force you to ride off your knees. Not only does this force your weight back against the cantle, you are also raising your

center-of-gravity, thereby making your seat less secure. Another reason to break your saddle in at the walk, is to not only build the back muscles of your horse, but also get you the ability to sit deeper in the saddle, and lower your center-of-gravity - security.

When the saddle is balanced front to rear, and fitted for your horse's asymmetry, adjust the stirrup-bars for your natural aerobic frame. Please don't make any compensations to your position, or the adjustment to the stirrup bars will be counterproductive. Once you achieved that position, in your upper-torso, adjust the stirrup-bars for that preferable shoulder-hip-heel position that will give you a relaxed lower-torso position as well allowing for, no activation of abductors, hip-flexors, psoas, and quadriceps. In that position, your leg may hang more vertically than your trainer wants, but the importance for you, is that longer leg position, will allow your legs to drape around your horse and have full use of your calf muscles and naturally drop your heels.

If you have children or had to care of younger siblings when you were younger, you most likely hipped those children. If that is the case, and are right-handed, your left hip will mostly be positioned outward, and your right hip may also be rotated to the left. The problem here, is that you are always going to be sitting on your left half-halt and have difficulty getting your right sitting bone into the seat of the saddle – if that is the case, adjust the right stirrup-bar one hole back from the left side. Left-handed riders do just the opposite.

You may find yourself falling on the fore after a few weeks of riding. This takes place for women that had been excessively gripping with their knees, consequently over-developing quadriceps and adductors. In our saddles you will find that you can't grip with your knees, which will over-time atrophy your quadriceps and adductors – that relaxed leg, will often times require you to move the stirrup-bars one or two holes forward.

It has to be understood, that when the horse can move with less resistance of saddle and rider, allow the rider a position where they can use their core strength, representing 'live-weight' to their horse, and have the saddle fitted to take into consideration the asymmetrical build of their horse, doesn't mean there is going to be a magical fix – it may require patience.

This is not rocket science, this only takes a basic knowledge on how you would go about building the correct musculature for both you and your horse, through the 3 prerequisites for correct muscle development and strength; full-range-of-motion, repetition, and resistance – you are one in the same.

aIf you have an air-panel saddle, the instruction manual is found under the ‘form’ tab on our Web Site:

www.equineinspired.info

If other questions arise, don’t hesitate to call Patricia at 262-472-0014, and she will contact either me or Chris. We also will give you names and contact information of a lot of riders and trainers that have gone through some difficult transitions, that have volunteered to help you find the ‘light at the end of the tunnel’, and are more than willing to help you through this phase.