Saddle Fit eGuide

30 YEARS OF SERVICE ANNIVERSARY

SCHLEESE

Ride Pain Free

Est. 1986

The *female* Saddle Specialist

Infinitely Adjustable for Optimal Comfort

Version 2.0
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Pan Am Team Silver Medalist Tina Irwin with Laurentio

Saddlefit 4 Life®

Protecting Horse and Rider from Long-Term Damage

Signs of Poor Saddle Fit to Rider

- feeling 'pulled apart' at the hips
- back pain
- neck pain
- knee pain
- slipped disc
- urinary tract infections
- pelvic discomfort
- poor position
- behind or in front of the motion
- knees and toes out
- fighting the saddle
- chair seat
- legs swinging
- out of balance
- feeling 'jarred' during sitting trot

Signs of Poor Saddle Fit to Horse

- resistance
- 'girthiness'
- lack of engagement
- stumbling, tripping
- rearing, bucking
- tight hollow back
- sore sensitive back
- irregular gaits
- 4 beat canter
- tongue faults
- poor work attitude
- pinned back ears
- blisters
- tail swishing
- swelling
- stress lines
- hunter's bump
- muscles atrophy
- lameness

> If your equipment doesn't fit, you will have huge problems from the get go. You won't get very far with a horse that isn't comfortable, a saddle that doesn't fit, and as a result, a rider that is out of balance because the saddle pushes him too far forward or back.
>
> **Christilot Boylen**, Canadian Dressage Team Member, multi-Olympian

Rider Saddle Fit Checklist

By Jochen Schleese CMS, CSFT, CSE

If the saddle doesn't fit the rider well, the rider's pain and discomfort will be translated down to the horse. This checklist will help you determine if the saddle fits you well.

	Yes	No
1. Does your leg hang comfortably and loosely straight down?	☐	☐
2. Is the saddle comfortable for you between your upper inner thighs (this is where the twist is) or do you feel 'pulled apart' in this area (soreness in the hips)?	☐	☐
3. Can you feel your seat bones?	☐	☐
4. Are the stirrup bars in the correct position to allow you to achieve the shoulder-hip-heel straight line?	☐	☐
5. Is your knee comfortably placed on the flap or is it angled outward?	☐	☐
6. Is the flap visible behind your leg when you are in the stirrups?	☐	☐
7. Can you perform a pelvic tilt (forwards and backwards movement) comfortably without pain at your pubic symphysis or in the crotch area?	☐	☐
8. Do your thigh/knee rolls impede movement at your hips, knees, or ankles? Are they too long, big or small? Do they support you or are they in the way?	☐	☐
9. Can you post comfortably?	☐	☐
10. Is there enough room in front and behind your pelvis so that during posting you don't hit your pubic bone and during sitting trot you are not thrown out of the saddle at the cantle area?	☐	☐
11. Is the saddle flap long enough so your boot top doesn't catch on it?	☐	☐
12. Is the seat seam comfortable and unnoticeable?	☐	☐
13. Are you in balance during the walk? Do you have enough support from the saddle to be able to sit properly in position while the horse is walking?	☐	☐

Did you answer No to any of the above? Contact us at info@schleese.com to book your 80-Point Saddle Fit Diagnostic Evaluation.

The 9 Points of Saddle Fitting

By Jochen Schleese CMS, CSFT, CSE

Your saddle affects the way you ride and the way your horse performs. The nine points of saddle fitting will help you determine if your saddle fits your horse well.

		Yes	No
1	**Balance** The center of the saddle (seat area) should be parallel to the ground while on the horse's back.	☐	☐
2	**Wither Clearance** Clearance at the withers should be 2-3 fingers for normal withers, whereas, mutton withers will have more clearance and high withers will have less clearance.	☐	☐
3	**Gullet Channel Width** The gullet should be wide enough not to interfere with the spinal processes or musculature of the horse's back (3-5 fingers).	☐	☐
4	**Full Panel Contact** The panel should touch the horse's back evenly all the way from front to back; some panels may be designed off the back end to allow the back to come up during engagement.	☐	☐
5	**Billet Alignment** The billets should hang towards the girthing area of the horse. Gravity will pull your saddle forward if this is not the case.	☐	☐
6	**Saddle Length** The shoulder and loin areas should not carry any weight of the saddle and rider. Rider weight should be on the saddle support area only.	☐	☐
7	**Saddle Straightness** The saddle should not fall off to one side when viewed from back or front. The tree points should be behind both scapulae (shoulder blades).	☐	☐
8	**Saddle Tree Angle** The panel tree points should be parallel to the shoulder angle to position saddle properly.	☐	☐
9	**Saddle Tree Width** The tree width should be wide enough for saddle to fit during the dynamic movement of the horse.	☐	☐

Did you answer No to any of the above? Contact us at info@schleese.com to book your 80-Point Saddle Fit Diagnostic Evaluation.

80-point Saddle Fit Evaluation

Every horse and rider is unique. But we all want to be riding in a saddle, fitted for optimal comfort and freedom, allowing healthy back movement, and helps us be better riders as we enjoy our horses.

Find our how well you saddle fits you and your horse in the comprehensive Saddlefit 4 Life® diagnostic Saddle Fit Evaluation. This includes static and dynamic measurements, assessments, and analyses of horse, rider and saddle.

55 Points to horse

Measurements using the Sprenger® gauge, wither gauge, *Arc Device*™, and Horse Shape® (optional), include: length of saddle support area (SSA), width of spine, symmetry and size of shoulders, height, width and size of withers, musculature; shoulder blade angle and width; width and curvature of the back; signs of stress and sensitivity – to name a few.

25 points to rider

Assessment includes fit of your current saddle, gender and build, seat size, flap length, flap angle, seat depth and support, position, balance and level of comfort. Various measurements and ratios and considered - leg, hip, thigh height, weight, training level of horse and rider.

Saddle and tack

- Static assessment and measurements of: tree integrity, condition of billet, stitches and leather, saddle pad, saddle length, billet position, gullet width, vertical and horizontal panels, Saddle Support Area (SSA).
- Dynamic assessment of: SSA, dust pattern, riding observations, behaviors, movement and position. Sizing saddles are adjusted to horse's conformation for rider to experience the 'wow' feeling of optimal fit during the ride analysis.

In order to maintain Schleese's high standard for ongoing service and client satisfaction, Jochen Schleese, CMS, CSFT, CSE trains and certifies Schleese Saddle Fit Technicians, affiliated Independent Saddle Fitter and Equine Ergonomists.

Contact info@schleese.com to book your 80-point Saddle Fit Evaluation

A Saddle Just for Women

Riders should be comfortably positioned and balanced to enhance the giving of aids, while supporting the horse in motion. Many women ride in saddle that have been made for men, and don't realize that female anatomy needs to be considered for proper saddle fit and comfort.

- The female pelvis usually requires a higher cantle and supporting seat foam to prevent the rider from 'collapsing' at the hip, resulting in a chair seat.
- The female hip angle pushes the leg naturally forward, sending her knees and toes outwards at a 45 degree angle on a male saddle. In order for the upper leg to hang straight, most women will require a narrow twist between their upper inner thighs, allowing a closer feel to the horse.
- The gluteal muscles on a woman are positioned higher than on a man, and she has a shorter tailbone. Since she balances her pelvis as a tripod, using her seatbones and her pubic symphysis, the saddle made for women requires a cutout area at the front – padded with soft and supportive material to relieve pressure and avoid rubbing here.
- The seat bones in the female pelvis are wider than those of a man, which leads to a wider seat to accommodate the pelvis.
- The relatively longer upper to lower leg ratio is accommodated by extended stirrup bars, which allow the leg to hang more perpendicular.

Women need to be comfortably positioned and supported to promote the giving of aids. The saddle is the interface between the horse's horizontal spine and the rider's vertical spine, distributing the weight of the rider comfortably over the horse's saddle support area. Prevent issues, discomfort and pain! Sit properly balanced in an ergonomically designed saddle especially for you! Are you riding in a saddle made for a man? Don't settle…

SADDLE FIT *for Women*

What you need to know if you're a woman looking to buy a saddle

By Jochen Schleese CMS, CSFT, CSE

Riding should not hurt. Unfortunately, many women are riding in saddles that have been made for men. They're suffering in silence, tolerating the pain because they simply may not know what they don't know.

Saddle fitters should have a basic understanding of equine biomechanics and how saddles need to fit to prevent long-term back damage in the horse. What many may be lacking is a realization that female anatomy can impact saddle fit. Several key points need to be addressed when determining proper saddle fit for women.

TWIST AND THIGH

The twist is the part of the saddle that touches the upper inner thighs. The width between the upper inner thighs affects the width of the twist of the saddle. Because of a phenomenon called "Qflexion" (female thighs tend to angle outwards at the hip and inwards at the knee), women will carry more weight on their upper inner thighs than men.

When a woman sits on a male saddle that is too wide between her upper inner thighs, her leg is pushed forward, and her knees and toes are out at a 45-degree angle. The position results in a leg that goes out and forward, and it is difficult to achieve the 'shoulder-hips-heels' straight line. This is different when a woman sits on a female saddle, allowing the toes to point forward while leaving more upper leg on the barrel or sides of the horse.

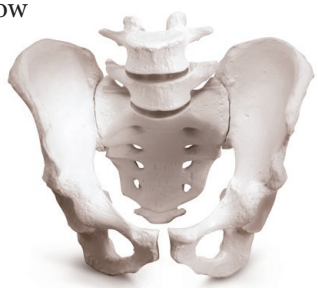
LEG LENGTH RATIO

Most women have a longer upper leg than a lower leg. The ratio of the the position and/or length of the stirrup bar. The analogy here is that the stirrup bar acts like the fulcrum and the stirrup leather is the pendulum. With a regular stirrup bar positioned normally, the female's leg will usually end up being too far forward ("Legs back, ladies!") because the leg will fall according to its centre of gravity.

Therefore, for women, an extended stirrup bar (or sometimes even an extra-extended stirrup bar) which allows the stirrup leathers to be positioned further back will ensure that the leg hangs in the correct position. Most men have pretty equal leg lengths so they do fine with the normal stirrup bar length and position.

HIPS AND FLAPS

Women's hip bones are articulated onto the pelvis at the joint differently than those of men. Especially female

	Female	Male
Pelvic Structure	Wide 	Narrow 
Spinal Column	Hollow back	Relatively straight (with respect to lumbar area)
Balance Point of Pelvis	Farther forward	Middle of pelvis (on seat bones)
Pubic Symphysis	Fairy flat and low - will hit the pommel area	Relatively higher and steeper angles
Hip Joints	Articulation is angled to the side Shorter tail bone	Articulation straight, allowing the leg to hang straight Longer tail bone

adult amateur riders, who started riding later in life or who don't ride regularly, are challenged to have their legs hang straight, because the articulation causes the legs to naturally angle out. Changing the angle of the flap and possibly also the position of the thigh roll can address this with a female saddle. If the flap is too straight, the knee comes too close to the front of the flap, and in motion the leg will actually go over the flap. Forcing this ("Legs back!" – again!) can move the pelvis forward, resulting in back pain or discomfort. Proper flap positioning is another small point in accommodating the female anatomy in saddle design.

SEAT WIDTH

Many saddle fit mistakes occur during measurement of the width of the twist (as previously discussed) and the width of the seat. Whereas the twist is that area of the saddle which is actually located between your thighs, the width of the seat is determined by the space between the seam running along the outer edge of the seat. In the male pelvis, the seat bones are much closer together and the distance between the two seat bones is much smaller. Therefore, he fits into the padded part of most saddles very comfortably.

In the female pelvis, the seat bones are much further apart, which means that if she is riding in a 'male' saddle, she will likely be sitting on the seat seaming, which is generally pretty uncomfortable. Often, seat twist and seat width are mixed up, and she will end up buying a saddle with a wide twist rather than the wide seat she needs to accommodate her pelvic shape. As a result, the knees and hips will angle out instead of being able to hang straight down and she will not sit comfortably for both reasons – the twist is too wide, and the seat is too narrow.

You need to look at the distance between the seams on the seat, which should be wide enough to allow the female seat bones to sit on the padding. If this is too narrow, it feels like you're sitting on a ridge, or that your seat bones are falling off the edge of the seat.

PERPENDICULARITY

Another area of consideration is the position of the pelvis itself. The male pelvis has a relatively higher pubic symphysis (ps) – when he sits in a balanced position with his spine perpendicular to the ground on the saddle, his ps will be tipped upward and not in contact with anything. In contrast, when the female sits on the saddle with her spine perpendicular to the ground, her ps is much lower and closer to front of saddle—to the point of contact and rubbing. When a male rider sits on a male saddle, he can balance on his seat bones as on a bipod, whereas the female

finds her balance on a male saddle in a tripod position—which means her ps will be in contact with the front of the saddle.

BUTT HEIGHT

The last area of consideration is the ever-popular gluteus maximus muscles. A female's 'butt cheeks' are generally higher placed than those of a male, and will benefit from added support or 'push' from behind.

This can be accomplished with the use of additional padding in the seat foam to allow the woman to maintain a proper seat without collapsing at the hip and resulting in a chair seat.

So, ladies, don't let the 'women's equality' mentality dictate your saddle choice. Settling for a 'male' saddle could translate into potential discomfort for your horse and an uncomfortable ride for you.

	Female	Male
Upper Leg	Femur is bigger on top and gets narrower down the knee. Articulation at joint has wider angle, which makes it difficult for the leg to hang straight 	Femur remains pretty much same thickness from top to bottom. Articulation angle relatively smaller, allowing leg to hang straight 
Quadriceps and Hamstrings	Muscle looks rounder when viewed from front - not much "space" visible between legs	Quadriceps and hamstrings more defined on front and back of leg (less on sides), which leaves more room between the legs at the top
Seat Bones	Farther apart to accommodate birth canal	Closer together

When Horses Behave Badly

Unwanted behaviour may be caused by a poorly fitting saddle

By Jochen Schleese CMS, CSFT, CSE

There have been an abundance of articles discussing such problems as how to slow down the rushing horse, how to ride the stumble out of your horse, or how to make your horse go forward.

Often rider error is perceived to be the cause, addressed by suggesting ways to change rider behaviour. In some cases, consulting a veterinarian is suggested. However, these negative and unwanted behaviours may actually be caused by something as simple as an improperly fitting saddle. A saddle that does not sit correctly impacts the reflex points and causes basic instinctive reactions in the horse, rather than conscious behaviours.

Sometimes there are health reasons at the heart of negative behaviour, such as illness or lameness. However, before calling the vet, consider investing in a simple diagnostic evaluation of your saddle. A qualified saddle fitter understands equine biomechanics and anatomy, as well as the ramifications for your horse if the saddle does not fit properly.

It is widely accepted that horses do not consciously behave badly; rather, they react to outside stimuli. A variety of unwanted behaviours can be caused by a poorly fitting saddle or an incompetent or untrained rider, or both. How and where a rider's weight is carried on the horse's back can make a huge difference to the horse's comfort level, and the horse can develop resistant or evasive behaviours when a rider's aids are misunderstood or mishandled. Frustration mounts when a rider does not get what she is asking for, and an unpredictable or dangerous situation could be the result. Some of these adopted behaviours become stereotypical. They are not vices, as vices would infer that.

If the saddle puts pressure on the reflex points along the spine because of a gullet channel that is too narrow, or the saddle twists during movement because of natural asymmetry, the horse will reflexively lower its back to escape the pressure or pain. The goal to have the horse engage its back becomes unachievable. The forward impulse and momentum is lost, the rider is out of balance, and the horse becomes defensive and won't go on the bit. The result is a frustrating experience for both horse and rider. The horse would like to respond to the rider's aids, but the pressure on his reflex points inhibits his ability to do so.

Think about your own reflexes. Even when your doctor asks you to refrain from kicking out when he taps your patella, your reflexes instinctively react with leg movement which you are unable to control.

A saddle that consistently puts pressure on the horse's reflex points, known as cranial nerve 11, is not only uncomfortable for the horse but could eventually cause injury. For example, what happens when you give your horse the signal to move forward? If the saddle tree angle is too wide, or the tree width is too narrow, the tree is putting too much pressure on the reflex points and the horse cannot really comply. When the saddle hits the reflex point it hinders the horse's ability to move. The horse's actual instinctive reaction at this point is to drop his back, locking the shoulder, and rotating the pelvis. Despite best intentions, the horse instinctively will not, and more importantly, cannot move forward. He wants to obey his rider's desire to go forward but needs to obey his own instincts to stay still.

It is a losing proposition for the horse physically and psychologically as the rider thinks his immobility is simply stubbornness and starts using spurs and whip.

Cranial Nerve 11 (CN11)

Horses evolved in North America over millions of years, adapting and

evolving with their habitat. As climates cooled, forests retreated and grasslanddominated. Horses became grazers and learned that herding and living in small groups enhanced their chances of survival. Social behaviours developed as well as combative behaviour among stallions. To protect harems and defeat opponents, stallions developed the instinct to bite their opponents in the wither area and literally bring rivals "to their knees."


PHOTO: CJ'S CARTER/FLIKR

Stallions will also bite mares in the same area in preparation for mating – to stop them from moving forward in order to mount them safely. Predators will also attack in this same region of the neck to hinder the flight response and bring the prey down.

This reflex point in the wither area is known as cranial nerve 11 (CN11), and nature has determined three survival mechanism reflexes for this vulnerable spot. If the mare or the rival horse is bitten at that point, the nerve sends a signal to the brain that the movement in the upper arm and shoulder blade be blocked. The second signal ensures that the longissimus dorsi muscle (the long back muscle the saddle sits on and the largest muscle in the horse's body) contracts, dropping the horse's back so that the vertebrae fall into each other as in kissing spine syndrome. Kissing spines constitute a condition in which sections of bone attached to the vertebrae are too close and rub together causing pain. The third response is that the pelvis will rotate forward and open as a result of further contraction of the longissimus, opening the area in preparation for mating. Improperly placed pinching gullet plates, lunging girths, vaulting girths, driving harnesses, and foregirths will achieve the same result as the stallion's bite by acting like a vice grip upon the muscles in the wither region. All three of these reactions will result in instinctive immobility for the horse. In nature these reactions are critical for survival and allow the stallion to mount the mare without being kicked, or ensure that the rival is immobilized during a fight for dominance.

The paradox is that we as riders want to achieve exactly the opposite. We want a horse with a loose, supple, and engaged back, with the ability to step under with the hind end. We want to take pressure off all the ligaments, tendons, muscles, and bones of the horse in order to keep it healthy and sound for a lifetime of enjoyment and harmonious riding. To achieve this we must ensure that there is no pressure on cranial nerve 11 from an ill-fitting gullet plate.

Bucking Reflex

This reflex point is located over the fascia behind the 18th lumbar vertebra. The fascia is the large sheet of connective tissue draped over the horse's back and loins, and aids the abdominal muscles in supporting internal organs. The horse's first reaction is to try to get rid of pressure from a saddle that is too long and pressing on the fascia over the transverse processes. These are the bony projections on each side and the top of the vertebrae which are sites for ligament and muscle attachment. Further indications of a saddle that is too long are the horse doing a pace during the walk (both front and hind legs on one side move together rather than diagonally.

Girthiness

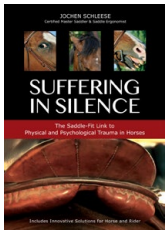
When using a short girth, watch that the buckles do not press on the edge of the pectoral muscles. For a long girth, attention must be paid to the same issue, but at the edge of the latissimus dorsi. The buckles can cause concentrated pressure points in these areas causing the muscle fibres of the triceps to contract as they try to avoid the pressure and soreness that often lead to rub marks. It is an instinctive, self-protection measure.

The rider will have difficulty finding a good extension in the trot and will experience poor transitions between the gaits. The pectoral muscles need full range of contraction and relaxation to allow huge and natural extension. Only with complete freedom will the biomechanics work the way they should.

If either the panel points or the billets exert pressure on the subscapular and thoracodorsal nerves, the natural reflex from both or either of these nerves will also cause the triceps to contract, inhibiting movement in the front. The horse moves like a "sewing machine" (on the spot, more or less) and tripping or stumbling can also result.

below: The white chalk drawing shows the actual saddle support area and where the saddle should lie. The red triangles on the withers area show the highly sensitive area where a saddle should never ever lie.

Information & Resources



Suffering in Silence - The Saddle-Fit Link to Physical and Psychological Trauma in Horses Hardcover or Kindle Edition, Nov 1 2013 (208 pages; 224 color photos, 41 color illustrations)
by Jochen Schleese CMS, CSFT, CSE,
Revealing common and serious effects of ill-fitting saddles and providing solutions for horse and rider.

Beyond the 9 Points of Saddle Fitting — DVD (48 min.) by Jochen Schleese CMS, CSFT, CSE.
Jochen's DVD shows symptomatic causes of poor saddle fit and discusses common equine concerns, with a step by step system to check saddle fit using effective visuals and riding demonstrations.

Special Offer: Book and DVD only $30

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About Schleese Saddlery Service Ltd.

Schleese Saddlery - the Female Saddle Specialist has fitted saddles to over 150,000 horses and riders worldwide for more than 30 years.

We specialize in saddles made for women, especially for recreational and amateur riders who care about comfort for themselves and protection for their horses' backs. We carry a quality line of dressage, hunter/jumper, cross country, western trail/pleasurel and pony saddles.

Our saddles are custom made to each horse and rider's measurements for optimal fit, performance and back protection for both. As your horse develops, his 3-dimensional back shape and saddle support area will change. Our saddle's infinitely adjustable *AdapTree*® can be easily fitted on-site to accommodate your horse's growth and ongoing development, even to a new horse.

Our saddles are sold and serviced by a network of highly trained, certified professionals across North America and around the world (most of whom are riders themselves). We enjoy the endorsement of many top international riders and trainers – but more importantly, the trust of recreational riders who care about the health of their horses.

Schleese Saddlery Service Ltd. was founded by Certified Master Saddler Jochen Schleese in 1986.

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