Saddle Fit AND THE Changing 3-D Back Of Maturing Horse

By Jochen Schleese, CMS, CSFT, CSE

'Tis the season for buying young horses. Along with bringing the new prospect home come questions of when to start the youngster, and whether it makes sense to invest in a custom saddle.

First, I will clarify the term "custom saddle." I believe that true adjustability in a saddle is more important than whether it is "custom." An adjustable saddle can be changed to accommodate the horse's conformation as the horse matures, and that saddle is a worthwhile investment. Otherwise, you will likely have to buy several saddles over the course of your horse's lifetime to make sure the fit remains optimal.

If you do a value calculation based on investing in an adjustable saddle and paying for annual adjustments and maintenance vs. buying a new saddle every two or three years, you will come out ahead with an adjustable saddle, even if the initial outlay seems much larger. Consider that you can invest the money you would have spent on replacing the saddle several times, and earn interest on that money for 15 years. The adjustable saddle will also retain much of its value, allowing you to continue to "trade up" as new technology results in new models.

What does "custom" really mean? One of our competitors in the North American market – the company which uses the concept of "custom saddles" eponymously – was absolutely brilliant in its choice of name. But when people talk about their custom saddles you never know whether they are referring to the brand or the actual saddle type they are riding in.

Simply purchasing a saddle that may have been customized to fit your horse with a narrow, medium, or wide tree and panel flocking that has been somewhat moved around to accommodate the horse's back shape does not make it a custom product. Neither does your determination of seat size (anywhere from 16 to 19 inches) with special colour combinations and bling or leather types of your choice. There is nothing truly custom about these very superficial choices. These are personalized options that will be based on your tastes and requests; however, true customization begins inside the saddle with the tree itself.

For a truly custom saddle, the considerations need to



PHOTO ©ISTOCKPHOTO/ZUZULE

go beyond those mentioned, especially for the rider. Do not underestimate the importance of saddle fit to the rider. If the saddle is not right for the rider, it doesn't matter how well it fits the horse. The rider's discomfort will translate down and hinder optimal performance for both horse and rider. Specifically, watch for the following essentials to be correct:

- Twist (that part of the saddle that you feel between your upper inner thigh) to accommodate the articulation of the hip bones, to allow the leg to hang straight;
- Stirrup bar placement (women tend to need extended stirrup bars to allow their legs to hand straight because most women's upper legs are longer than their lower legs, which causes them to have a centre of gravity further forward and tends towards the "chair seat" position);

Join our Ranch Team for a 4 to 9 Month Working Holiday!

A working ranch in Manitoba's Assiniboine Valley WORKING HOLIDAYS INCLUDE: Riding • Cattle Drives • Natural Horsemanship



Tennesse Walking Horses For Sale • twhorse.com

TW RANCH Box 1209, Russell, Manitoba R0J 1W0 (204)773-2711 • trinder@xplornet.ca twranch.ca • facebook.com/twranch • youtube.com/twranch





In a mature horse. the saddle support area is visibly smaller because of the muscle development in the forehand and the resulting change of position of the shoulder blade. This must be taken into consideration during saddle fitting, and is one of the reasons why the saddle that fits the horse at age three may no longer fit at age eight.

- Cantle height to accommodate both the size and position of the gluteus (butt) muscles;
- Seat foam (some women will need more of a "push" from behind to allow them to sit without collapsing back into the saddle, again because of the size and shape of the female gluteus muscle and length of the tailbone);
- Flap length and position to ensure proper placement of the leg – both in front of and behind the leg there should be even amounts of flap showing.

For true customization there is the "plaster cast" method, which accommodates riders who may have had hip or pelvic injuries and have specialized needs, by taking a mold of their "nether regions." Customization begins with the tree. The top of the saddle is made to fit the rider and the bottom is made to fit the horse. It is actually much easier to fit the horse than the rider, because the points mentioned above are still only a part of what true customization entails.

For the horse, the following points must be taken into consideration:

Forward facing tree points (to avoid scapular damage during movement);

- Enough clearance at the top and the sides of the wither to allow complete freedom of movement;
- Proper angulation of the gullet plate to allow the shoulders to slide through' when moving;
- Asymmetric adjustability at the gullet plate to accommodate the horse's larger shoulder if necessary, to avoid saddle slip during movement;
- A gullet channel which is the proper width for a particular horse's spinal processes;
- Saddle length no longer than the saddle support area;
- Panel stuffing in the proper shape for the horse's three-dimensional back.

Again, these are just some of the customizations that can be made, and some of the things you can look for when in the market for a new saddle.

Three years is recognized as being the optimum age for a horse to be started under saddle. The horse's threedimensional back shape will undergo major changes in muscular conformation between the ages of three, five, and eight, and these changes will affect the saddle support area. During this time, the topline changes, the withers come up,



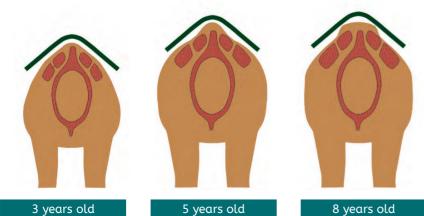
A young horse on the lunge line or under saddle should have wthe freedom of motion to move downward and forward, even when his centre of gravity is still pretty far back. A wellbalanced saddle plays an important role in helping the horse to learn from a young age.

Training between the ages of three, five, and eight affects the horse's conformation, resulting in changes to the three dimensional back shape and the saddle support area. and the shoulders broaden upwards and back.

The gullet plate of the saddle should be positioned at the base of the withers on the trapezius muscle. If the gullet plate has not been adjusted to fit properly with two to three fingers' width *all around* the front of the pommel (not just at the top), and the tree points have not been fitted to match the necessary width and angle of the shoulder blade, the horse will often exhibit resistant behaviour. This area at the withers is where the stallion bites the mare during mating to immobilize her, but the reaction is the same for any horse regardless of sex. The instinctive response is for the horse to stand still, drop its back, and mares will rotate the pelvis in preparation for breeding. Yet the rider on top often unaware of the influence of the gullet plate and tree points - urges the horse forward. The horse wants to do as the rider asks, yet instinctively also wants to react to what it is feeling, with the result that the rider feels resistance and calls the horse stubborn.

Saddles that are adjustable in both tree angle and tree width can be adjusted to accommodate the wider U-shaped wither muscle, allowing both proper muscular development and freedom of movement at the shoulder. If I had to choose, I would say saddle length, gullet width, and gullet (tree point) adjustability are probably the most crucial areas to fit. Saddle length in particular is often a problem: The saddle that fits in a horse's saddle support area at age five may not fit at age eight because of the muscular development of the shoulders (up and back), which actually shortens this area. If the saddle is too long, one solution is changing the panel to incorporate a relief wedge.

Training, nutrition, and other factors influence how



How do you know if the horse has enough training to carry a rider without damaging his back?

There are key points to look for:

- The horse's shoulder blade has come up and back, and has become wider and very defined.
- The neck is well-muscled, stronger on top (from the poll to the withers) and less muscled from the jawbone to where the neck transitions into the chest area.
- The trapezius is well-developed, defined behind the shoulder blade, and visible and defined longissimus and latissimus muscles.

the horse's three-dimensional back shape changes over time, and there are various diagnostic tools available that illustrate this. Of these, the HorseShape[®] 3-D ScanKit is one of the most innovative and provides a clear visual of these changes.

The shape and position of the gullet plate, the stiffest and most stable part of the saddle, must accommodate any natural asymmetry or unevenness in the horse's anatomy during saddle fitting. Its necessary function cannot be substituted with or eliminated by reflocking, shimming, or the use of other special orthotics in the panel area. Because unevenness at the horse's shoulders is a common problem, it is usually necessary to fit the gullet plate asymmetrically in order to achieve this necessary support equally well on both sides. Fitting the gullet plate asymmetrically will not result in twisting or making a crooked saddle, and this concept is something that many saddlers or fitters do not understand. Many use inexpensive saddle trees where these adjustment are simply not possible, and may give poor advice to riders who have had their saddles fitted in such a way that the gullet plate is visually crooked, rather than educating themselves about the reasons behind this asymmetric adjustment of the gullet plate.

If this crucial piece of saddle fitting is ignored and a saddle with a symmetrical gullet plate is put on a horse with an asymmetrically muscled shoulder, it will inevitably fall to one side as it is pushed there by the more heavily muscled shoulder (usually the left, twisting the saddle to the right). You will often see pictures of riders from behind, sitting on a saddle which seems to have slipped to the right. The saddle needs to be balanced in all directions: Front to back, top to bottom. Only then will both vertebrae be able to work as nature intended, protecting the bodies from long term damage while moving in harmony, allowing both horse and rider able to reach their potential.



Jochen Schleese, Certified Master Saddler, Equine Ergonomist, is a leader in the concept of saddle fit, and teaches his Saddlefit 4 Life® philosophy worldwide. He is also the author of Suffering in Silence, The Saddle-Fit Link to Physical and Psychological Trauma in Horses.

www.schleese.com • www.saddlefit4life.com