Selecting Your First Carriage

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Susie Buchanan driving Spirit by LuAnne Riddle. This photo illustrates how the shafts on a road cart should run slightly uphill from back to front. Note that shafts have moved slightly forward of the point of the shoulder.

I can be overwhelming to select your first carriage, especially when you aren't exactly sure what type of driving you will eventually participate in and have a tight budget. There are several considerations that will guide you so you select a carriage that will get you started in the sport safely. See as many carriages in action as you can. Speak to drivers and ask them what they like or dislike about their carriages. If you live near a carriage dealer take advantage of their experience. The good news is there are many well built modern starter vehicles that will allow you to participate in entry level activities, before you rush to specialize. The inexpensive vehicle you try to start with will not be such a bargain when you realize you need to step up in quality, and can't find a buyer for it.

• A two wheeled carriage is generally the best choice for those new to driving, and green animals. If a horse spins or spooks with a two wheeled carriage, he stays in front of the carriage. If he spooks in front of a four wheeled carriage, he can turn the shafts up to ninety degrees in relation to the body of the carriage, making it extremely unstable if he moves forward or backs up.

- The carriage must fit your horse to allow him to work comfortably.
- Its construction should allow you to drive safely in the conditions you will most frequently meet, place you in the seat securely and suit your size. You should be able to get in and out of it efficiently.
- It must be of an appropriate weight including weight of possible passengers.
- Can you handle the carriage on the ground as you move it to hook up, or load to ship it?

Telling Good Construction from Poor

• When working within a budget for an activity for which you don't know how long you will participate, it is tempting to try to go with a low budget. Carriage building is an art that combines sound

design and construction with aesthetic principles. There are a lot of homemade carriages out there that vary widely in quality, which have been built with minimal knowledge of carriage construction.

• What materials have been used in your carriage? Flimsy wood and light metal piping combined with poor welds, no bracing at stress points and poor quality hardware is not a recipe for a well built carriage. Even the smallest miniature horse can exert strong destructive forces upon a carriage.

What You Need to Know About Carriage Construction

A carriage taken to its bare bones consists of wheels and axle, somewhere to sit, suspension to make the ride softer for you and the horse, and a means to attach the horse. Be aware if you try to change one part of this construction that is meant to work as a unit, you may create unintended consequences as far as structural soundness and safety. If you use a carriage that has been designed for one specific use, and use it in different conditions you also compromise your and your horse's safety.

Wheels

- To a large extent, the size of the horse will determine the size of your wheels. As a rough estimate, the tugs will rest near three quarters of the height of the horse. So a sixteen hand horse (sixty four inches) will have tugs approximately at forty eight inches from the ground. In general, a larger wheel offers less rolling resistance over the ground.
- Wood wheels on hard rubber, and steel wheels (either on hard rubber or pneumatic tires) are the strongest. Bicycle spoke wheels are not as durable over unpaved, uneven terrain. A bicycle wheel is not constructed to take the lateral forces a carriage places on it, and will often have the spokes collapse. A more in depth article about carriage wheels is to follow.
- Most two wheeled carriages have the shafts running level or slightly uphill from the horse (road carts and Meadowbrooks). The seat board should be close to level (If you choose a wedge seat cushion, it needs to be placed on a level base.). A seat that tips back will make you want to lean forward.
- Balance: a two wheeled cart is balanced when there is minimal weight in the tugs, with minimal up and down motion in the shafts. Some two wheeled carriages allow you to move the seat in relation to the axle so you can adjust balance. Remember that balance can change when you add a passenger.
- Most modern vehicles have flush hubs, which protrude less than a traditional hub. This is useful for trail driving as well as competition. Wheel bearings should be high grade and maintained when needed.

Four Wheeled Carriage



front view rotated front 1



front view rotated front 1

Seat Cushion



front view of a flat seat and a wedge seat

Short Shafts vs. Long Shafts



Traditional shafts that end near the point of the shoulder.



Short shafts that end near the saddle.

Brakes

• Brakes are rarely needed on a two wheel vehicle, and in fact do not act as the brakes on the rear of a four wheeled carriage and certainly not as your car's brakes. Applying brakes on a two wheeler exerts extreme downward pressure on your horse's back. A driving horse should be taught to use his hindquarters to hold and slow down a carriage on a slope. Adding brakes also adds weight that may make it harder to move the carriage on the ground as you prepare to put to and unhook; or try to load the carriage on a truck or trailer.

Suspension systems

• For the most comfort for horse and driver, suspension (springs or other) should be between the axle and the body of the carriage. Torsion suspension between



I'll take you there

If you want a horse who is brave and always thinking forward, I'm for you. Ideal in a team, or by myself. Athletic, trainable, smart, with plenty of stamina. Forever elegant, and a great competitor!

I'm the American Saddlebred, and I'll take you wherever you want to go!



the wheels and axle is also an option.

• Small coil springs under the seat only provide little comfort to the driver and no relief for the horse over rough terrain.

Shaft Styles

- Shafts on a two wheeled carriage should join the body of the carriage with a solid connection. You cannot have independent shafts on a two wheeler as this is totally unstable and will send you out of the front of the carriage.
- Short shafts (shafts that end near the tugs rather than at the point of the shoulder) are a relatively new invention for marathon carriages. They were designed to lessen the chance that a horse could get a post stuck between the shaft and his shoulder in an obstacle.
- Some modern two wheelers have shafts that insert in sleeves so that they can adjust for length, and width. Don't forget to allow room that the harness takes up in the measurement of room between the horse's body and the shafts. A traditionally built carriage such as a road cart or Meadowbrook doesn't have this option.
- Shafts should taper towards the front of the animal from the back, versus being one width all the way.

How to Tell Your Carriage Fits

- The shafts allow room for the horse to work while going straight, and when he bends for a turn. He shouldn't be restricted between the shafts, nor should he be swimming in too much room.
- The shafts place him at a good working distance from the carriage. Traditional breaking carts place the horse a bit further from the body of the cart so the horse couldn't kick it. If the horse is too close to the cart, he will strike it when he lengthens his stride.
- If a cart is designed to be an "easy entry" with extra room in the foot cradle to allow you to step in more easily, make sure you can adjust the balance as the extra room in front will move the center of balance forward.
- You should have enough room to sit securely in the seat, with feet planted firmly on the floor. Your upper body needs room to move. A backrest that restricts or holds you in place will affect how well you can use your arms.
- For your back's comfort, your hips should be slightly higher than your knees. A wedge cushion opens the angle at your hip and lessens the strain on your back. This can be an issue for tall people driving small ponies.

Thank you to Jack Alvarez of Driving Essentials for his assistance with this article. \triangle

Room Between Shafts



View of pony and shafts from above and rear showing space between the pony and the shafts.



Front view showing space between the pony and shafts.