

Table of Shaft Lengths and Widths

[Table](#)

One of the first questions people ask when they go out looking for a carriage is "**How do I know if it will fit?**" Over the years there have been several charts printed to aid people by giving dimensions to help in buying the right size. This is a compilation of some of that information into one chart. How is this kind of chart possible? While horses body types are not identical, there is a dimensional ratio between various parts of the body compared with the height at the withers and this is adequately similar for the purposes of shaft design for different sizes of horse or pony.

What parts of the body need to be considered? Wither height, width at the shoulder, width at the saddle girth, croup width, length of trunk from point of shoulder to buttock and location of the stifle. An additional consideration is normal length of stride. Taking all these factors together helps define the space needed to give the horse sufficient room to move and to be comfortable, while also allowing room for the harness, and some leeway for a slightly larger or smaller animal. The information in this chart defines approximate dimensions needed to build or buy a traditional style of two-wheeled single horse vehicles or 4-wheeled pole type vehicles to fit a wide range of horse sizes. Adjustments may need to be made to accommodate heavy draft type horses, donkeys and small ponies or mini-horses. Vehicles designed for specific purposes like the modern marathon vehicle or an antique gig will often differ in dimensions to meet their specific needs. For example: marathon shafts are shorter and end at the saddle girth, or some gigs are made with narrower widths between the shafts. The size and design of the harness may also affect how a vehicle fits. A bulky saddle could require more space between the shafts. Style of breeching may affect the position of the breeching staple. Also the chart describes wheel height for two-wheeled vehicles. Wheels will be smaller on four-wheeled vehicles.

Table of Shaft Lengths and Widths for Traditional Style Vehicles

for Traditional Style Vehicles for Single Turnouts
Measurements in inches

Animal Height (in Hands)	17H	16H	15H	14H	13H	12H	11H	10H
Length of Shaft from Swingletree to Tip	85	80	75	70	65	60	55	50
Height from Ground under Shafts at Back-band Tugs	55	52	49	46	43	40	36	32
Width between Shafts at Back-band Tugs	25	24	23	22	21	20	19	18
Width of Swingletree	36	34	31	30	28.5	27	25.5	24
Length from Back-band Tug to Shaft Tip	24	22	20.5	19	17.5	16	14	12
Length from Back-band Tug Stop to Trace Hook	56	53	50	47	44	41	38	35
Distance from Breeching Staple to Trace Hook	30.5	29	27.5	26	24.5	23	21.5	20
Wheels - Diameter	51	48	45	42	39	36	33	30

Table of Pole and Splinter-Bar Measurements for Fixed Pole Carriages

For Pair and Four-in-Hand Turnouts
Measurements in Inches

Animal Height (in Hands)	17H	16H	15H	14H	13H	12H	11H	10H
Width of Swingletrees	36	34	31	30	28.5	27	25.5	24
Length of Pole from Splinter Bar to Polehead	115	110	106	99	94	87	80	72
Splinter Bar Length	68	64	62	60	58	56	53	50
Height of Pole End	45	42	39	37	35	34	31	28
Height of Splinter Bar	40	36	34	33	30	28	26	24

http://www.americandrivingsociety.org/DB_shaft_table.asp