

EQUINE GUELPH helping horses for life



Horse Trailer Info Sheet

Horse Trailer Safety, Part 1–Glossary

Accelerometer—An accelerometer measure acceleration, which in practical terms means changes in speed or direction.

Axle—a rod or spindle (either fixed or rotating) passing through the center of a wheel or group of wheels.

Baldness—Worn treads on tires

Breakaway System—Its function is to apply the trailer brakes if the trailer becomes completely separated from the tow vehicle.

Carbon Fibre—Material that consists of thin, strong, crystalline filaments of carbon, in the case of trailers, carbon fibre is mixed into polycarbonate plastic



Class "A" Licence—Trailer Weight itself is more than 10,000 lbs/4600 kg.

Class "A-Restricted" Licence—Trailer cannot have air brakes

Conventional—A trailer hitch configuration in which the trailer attaches to a hitch pivot point located near the tow vehicle's rear bumper.

Corrosion—Process that converts into a more chemically stable oxide, and results in the gradual detioriation by chemical or electrochemical reaction with their environment.

Coupler—This component is attached to the trailer tongue and is the part which actually connects the trailer to the hitch ball.

Curb Weight—Total weight of vehicle apart from passengers, cargo, or non-factory items; "the weight of the vehicle as it sits parked at the dealership."

Drawbar—What the hitch ball is bolted to.

Dry Rot—is visible cracking in a tire's tread or sidewall caused when a tire's rubber compounds break down.

Fibreglass—Fibre-reinforced plastic using glass fibres; can be used as the "skin" on a trailer

Galvanized Steel—Steel with a coat of zinc applied to help protect it and prevent rusting.

GAWR—Gross Axle Weight Rating - maximum amount of eight that can be placed on each of the axles as specified by vehicle manufacturer.

GCWR—Gross Combination Weight Rating - maximum weight of tow vehicle and trailer combination as determined by tow vehicle manufacturer.

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Gooseneck Trailer—Trailer hitch configuration which attaches to a hitch ball located in the truck bed over the rear axle.

GVWR—Gross Vehicle Weight Rating - maximum loaded weight of your vehicle (truck or trailer) as determined by the manufacturer; curb weight plus payload.

Load Equalizer Hitch—Hitch frame includes a receiver, detachable hitch plate and a trailer ball and attaches to tow vehicle's frame, which helps balance loads over multiple axles

Lug Nut—A large rounded nut that fits over the heavy bolt, used to attach the wheel of a vehicle to its axle.

Metal Fatigue—A weakened condition induced in metal by repeated stresses or loadings.

Oxidation—A chemical process that can break down vehicle paint and finishes from being exposed to heat and oxygen.



Payload—Maximum amount of weight a truck/vehicle can haul in terms of cargo, passengers - in truck cab, bed, or cargo area, or in trailer.

Powder-coated Steel—Steel coated with finely ground particles of pigment and resin

Ramps—As the name suggests, they are ramps into the trailer to allow a gradual incline for the loading of horse(s).

Rubber Torsion Suspension—Torsion axles have an attached construction with a rubberized suspension system. Four rubber cords inside the axle handle suspension travel and shock absorption.

Slant Load Trailer—The partitions in the trailer between the horses are at an angle rather than in perpendicular lines like straight loads.

Step Ups—Horses must "step up" into the trailer box.

Stock Trailer—Trailer with open slats on the sides, typically with no internal hardware (no partitions)/ used mostly for livestock

Straight Load Trailer—Trailer in which horses are loaded straight in, usually forward-facing and side by side.

Surge Brake System—A surge is a unit that is mounted at the front of a ball hitch mount (only works on ball hitch mounts) that allows a spring to compress when the momentum of the trailer pushes up against the tow-vehicle

Tag-along Trailer—Trailer is attached to the tow vehicle with a frame-mounted hitch

Tongue Weight—Static force (weight) that the trailer tongue places on the hitch.

Torque Wrench—Tool used to apply a specific torque (twisting force) to a fastener such as a nut, bolt.

TPMS—Tire Pressure Monitoring System installed in tow vehicle; can alert driver to low tire pressure.

Trailer Brake Controller—Offers smooth, precise stops, applying the exact amount of brake power based on the vehicle's momentum.

Trailer Sway—The trailer begins to move from side to side behind the tow vehicle, also called "fishtailing."

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TWR—Trailer Weight Rating; maximum GVWR weight of a trailer that the tow vehicle is rated to pull.

Valve Stem Cap—Protects the valve stem on your tire that keeps the air or nitrogen in them.

Vehicle Information Decals—Stickers applied by the manufacturer which give specific service information about that vehicle.

VIN—Vehicle Identification Number - serial number unique to the vehicle.

Walk-throughs—Trailer has a back and side entrance/exit for loading/unloading.

Weight Distribution Hitch—Hitch system that joins the tow vehicle and trailer with a ball and coupler, and uses spring bars to transfer weight from the rear of the tow vehicle to all axles of the tow vehicle and trailer.

Weight-Carrying Hitch—Hitch system in which all trailer's tongue weight is carried by the hitch.

