

Glossary of Towing Terms

Note: many of the definitions below are not standardized throughout the towing products industry. For the definition of those terms we have chosen the definition most generally in use. *Glossary provided by ROADMASTER Towing and Suspension Solutions.*

Ball Mount — the part of the hitch system that supports the hitch ball and connects it to the tow bar or trailer coupler. Adjustable ball mounts allow a hitch ball to be raised or lowered in order to level the towing system.

Base Plate — see “mounting bracket.”

Binding — when the tow bar is difficult to detach because of excessive pressure, the tow bar is said to be “bound.”

Car-Mounted — a tow bar designed to be mounted and stored on the towed vehicle.

Class 1 rated hitch — hitch receiver with a capacity of up to 2,000 pounds and 200 pounds tongue weight.

Class 2 Rated Hitch — hitch receiver with a capacity of up to 3,500 pounds and 300 to 350 pounds tongue weight.

Class 3 Rated Hitch — hitch receiver with a capacity of up to 6,000 pounds and 600 pounds tongue weight. Sometimes used to refer to a hitch with a 2-inch receiver, regardless of the weight rating.

Class 4 Rated Hitch — hitch receiver with a capacity of up to 10,000 pounds and 1,000 pounds tongue weight. (many times any hitch with a capacity greater than 6,000 pounds is referred to as a class 4.)

Class 5 Rated Hitch — hitch receiver with a capacity greater than 10,000 pounds and 1,000 to 1,200 pounds tongue weight.

Class A Motorhome — a recreational vehicle with the living accommodations built on or as an integral part of a self-propelled motor vehicle. Class a motorhomes range from 24 to 40 feet long.

Class B Motorhome (A.K.A. “Camping Van Conversion”) — a class b motorhome is built within the dimensions of a van, but with a raised roof to provide additional headroom. The accommodations inside are designed for short trips or vacations. Class b motorhomes usually range from 16 to 21 feet.

Class C Motorhome — a recreational vehicle with the living accommodations built on a cutaway van chassis. A full-size bed in the “cabover” section allows for seating, kitchen and bathroom facilities in the motorhome. Lengths range from approximately 16 to 32 feet.

Converter — a “3-to-2 converter” converts the electrical signals in a tow vehicle with separate (3-wire) brake and turn signals to tow vehicles with combined (2-wire) brake and turn signals. Conversely, a “2-to-3 converter” converts the electrical signals from combined to separate.

Coupler — the component that connects the tongue of a trailer or tow bar to the hitch ball.

Crossbar — a roadmaster exclusive, the crossbar is necessary to support many vehicles, especially passenger cars, while they are being towed.

Curb Weight — the total weight of a vehicle and all necessary fluids (water, coolant and oil) and a full tank of gas, when not loaded with either passengers or cargo.

Diode — diodes allow the towed vehicle’s brake and turn signal lights to mimic the motorhome’s (which is required by law) without damaging the towed vehicle’s electrical system. They allow current to flow in only one direction, thereby eliminating electrical feedback, which could damage the towed vehicle’s wiring, fuses or other electrical components.

Dry weight (or “DW,” A.K.A. “unloaded vehicle weight”) — the weight of the motorhome (or towed vehicle) without adding fuel, water, propane, supplies and passengers.

Fishwire — a technique used to install many automotive aftermarket accessories. For example, if the available space is too small to position an attachment bolt by hand, a length of wire is threaded onto the bolt and the bolt is maneuvered (“fishwired”) into position using the wire, which is then removed.

Gross Axle Weight Rating (or “GAWR”) — the maximum allowable weight that a single axle (front or rear) can support. GAWR applies to tow vehicle, trailer, fifth-wheel and motorhome axles. The GAWR is typically listed on a data plate near the front of the vehicle.

Gross Combined Vehicle Weight (or “GCVW”) — the actual weight of a towing and towed vehicle, including all passengers and payload.

Gross Combined Weight Rating (or “GCWR”) — the maximum allowable weight of the combination of the motorhome and towed vehicle (or the tow vehicle and trailer or fifth wheel). It includes the weight of the vehicles, the cargo, passengers and a full load of fluids (fresh water, propane and fuel).

Gross Vehicle Weight Rating (or “GVWR”) — how much weight a vehicle is designed to carry, set by the manufacturer. The GVWR is typically listed on a data plate near the driver’s doorframe, and includes the net weight of the vehicle, plus the weight of passengers, fuel, cargo and any additional accessories.

Hitch (or “Receiver Hitch”) — a device which attaches directly to a tow vehicle, providing the connection to the ball mount and trailer. Note: tow bars are sometimes incorrectly referred to as hitches.

Hitch Adaptor — fits onto the receiver tube of a hitch and converts it from one size to another (from 1¼" to 2", or from 2" to 1¼"). A hitch adaptor may reduce the weight capacity to the rating of the adaptor.

Hitch Ball — the ball-shaped attachment on the ball mount onto which a coupler is attached. The coupler mounts and locks on top of the hitch ball and encompasses the hitch ball.

Motorhome-Mounted — a tow bar designed to be mounted and stored on the motorhome.

Mounting Bracket (A.K.A. "Bracket" or "Base Plate") — connects the towed vehicle to the tow bar. All mounting brackets are bolted on to the subframe of the towed vehicle.

Proportional Braking — a supplemental braking system which brakes at the same time and intensity as the motorhome is said to be "proportional." Roadmaster manufactures

Two Proportional Systems — a direct system (Brakemaster) and a portable system (even brake).

Quick-Disconnects — the connection point between the tow bar and the tow bar mounting brackets. These components allow the tow bar to be quickly connected and disconnected. There is one quick-disconnect ("QD") for the driver's side and one for the passenger side.

Quick Links — used to attach the safety cables. They look like one link in a chain, and have a nut which can be threaded up or down to open or close the link.

Removable Bracket Arms — all mounting brackets have arms which extend out from the vehicle. Roadmaster's XL, MX and EZ brackets have arms that can be easily removed, making the bracket virtually invisible.

Safety Cables/Safety Chains — required by law, safety cables connect the towed vehicle to the towing vehicle. They are a secondary safety device to hold the vehicles together if the towing system separates for any reason. (safety chains are commonly used with trailers or fifth wheels)

Stinger — the part of the tow bar that inserts into the motorhome's receiver hitch. A hitch pin and clip secure the tow bar to the motorhome.

Supplemental Braking — an independent braking system that brakes the towed vehicle in tandem with the motorhome.

Tongue Weight — the weight of the towed vehicle which is pressing down on the hitch. Receiver by the towed vehicle, which is typically listed by the manufacturer. Tongue weight should be between 10 and 15 percent of the towed weight.