

Towing Capacity Limits Location

(Where to Find the Capacities)

One of the most important elements in towing is to **never exceed the lowest capacity component** of the towing system. The towing system comprises every component involved directly or indirectly with towing from the front of the towing vehicle to the rear of the trailer being towed. It encompasses the vehicle weight & capability to tow, the individual components capacity to tow (i.e. Hitch Ball capacity), The weight, capacity and specifications of the trailer and all electrical and lighting.

To ensure you do not tow more than your system can tow safely, it is important to identify the capacity of each component as well as your vehicle.

Your vehicle's towing capacity is the maximum amount of weight it can safely pull, which changes based on how it's configured, how much weight it's already carrying (the Tow Vehicle's payload), and how you distribute and control the load you need to tow.

It's important to note that the maximum amount of weight listed on a vehicle assumes that the Tow Vehicle is carrying only a driver. If you plan to tow a travel trailer and bring along your family and all the associated gear they'll need for a weekend away, the manufacturer's calculations will not be accurate for your load

Where to find the capacity of each component?

The following serves as a guide to locating component capacity. If you do not know the capacity of a component, do not tow until you do and you are certain every component's capacity exceeds what you are towing. See also the <u>bROK Towing Definition</u> page for more clarification on terminology and acronyms.

On the Tow Vehicle

- Many truck and SUV manufacturers today post a sticker on the driver's door jamb (the "B" pillar that includes much of the necessary towing information, such as GVWR (Gross Vehicle Weight Rating).
- The vehicles owner's manual will add to this specification to include GCWR (Gross Combination Weight Rating) which is the maximum amount of weight the vehicle can carry including the trailer's "Tongue Weight".
- Nearly all vehicles have various "packages" that can affect the towing capability. Use your owner's manual as a guide and for the most accurate information, take the vehicle to a local dealership where they can look up your specific vehicle's towing capabilities.



On the Ball

- The capacity of the bROK Hitch Ball is permanently stamped on the top of the Hitch Ball. The capacity is typically in pounds (lbs). This is the maximum total weight of the trailer (fully loaded with gear and supplies) that can be towed.
- o Exceeding this capacity can cause loss of trailer, serious injury, and/or death.



On the Ball Mount

- o The capacity of the bROK Ball Mount is located in two places on the Ball Mount.
 - First it is located on the front label of the Ball Mount. Second it is stamped on the Ball Mount under the front label. This is done in case the label peels off over time, the capacity is still present on the Ball Mount.
 - There are two key Ball Mount capacity numbers:
 - GTW (Gross Towing Weight): This is the maximum weight of the trailer fully loaded that can be towed
 - TW (Tongue Weight): This is the vertical weight of the tongue (Coupler) when the trailer is fully loaded. Generally, this number is 10% of the GTW
- Never exceed either the GTW or the TW specified capacity of the Ball Mount.
 Exceeding either the GTW or the TW capacity can cause loss of trailer, serious injury, and/or death.





Pins and Locks

- O Towing Pins and Locks are sized and rated to the various Classes of the Hitch and Ball Mounts. These are available in two diameter sizes (½" diameter and 5/8" diameter) and various lengths to meet the Class requirements. In general, there are no capacity specs to find on these, rather they are specified by the Class. The Class determines the diameter and length of the Pin or Lock.
 - A Class I & II Ball Mount has a 1 ¼" shank (to go into a 1 ¼" Hitch receiver tube). These require a Class I or II pin /Lock with a ½" diameter shaft.
 - A Class III/IV Ball Mount has a 2" shank (to go into a 2" Hitch receiver tube). These require a Class III or IV Pin /Lock with a 5/8" diameter shaft.
 - A Class V Ball Mount has a 2 1/2" shank (to go into a 2 1/2" Hitch receiver tube). These require a Class V Pin/Lock with a 5/8" diameter shaft.
 - bROK Channel Mounts require bROK Pins and bROK Locks specifically labeled for Channel Mounts. These must be the same brand name as the Channel Mount. (e.g. A bROK Channel Mount requires a bROK Channel Pin or a bROK Channel Lock.
- Never use the wrong class Pin or Lock. Always ensure you are using the correct Pin or Lock in your towing system. Using the wrong Pin or Lock in your towing system can cause loss of trailer, serious injury, and/or death.







Chains & Chain Components

- Towing Chains and Chain components such as Quick Links have the rating capacity on the packaging and product labels when bought. Some capacities can be also be found stamped on the product.
- Always ensure you are using a Chain and Chain Components with the correct capacity for your towing system. Using a Chain or Chain component that is underrated in your towing system can inhibit its ability secondary safety connection in the event of a primary Tow Ball and Coupler connection failure.
- Using an underrated Chain for your towing system can result in loss of trailer, serious injury, and/or death.



On the Coupler

- The capacity of the bROK Coupler is located in two places on the Coupler.
 - First it is located on the top label of the Coupler. Second it is stamped on the Coupler under the front label. This is done in case the label peels off over time, the capacity is still present on the Coupler.
 - The Coupler capacity is stated as GTW (Gross Towing Weight): This is the maximum weight (in lbs) of the trailer fully loaded that can be towed
- Never exceed either the GTW specified capacity of the Coupler. Exceeding the GTW
 capacity can cause loss of trailer, serious injury, and/or death.





On the Trailer

- What's the difference between GVWR and GVW? The gross vehicle weight rating (GVWR) is the maximum amount of weight the trailer is able to safely hold and transport, as rated by the manufacturer. The gross vehicle weight (GVW) is how much the trailer and its payload weighs together.
- Your Trailer's weight and Load Limit should be located on a label on the left side. This label will show your trailer's GVWR (Gross Vehicle Weight Rating) and GVW (Gross Vehicle Weight).
- Never overload your trailer. An overloaded trailer can be very dangerous and result in loss of trailer, serious injury or death.