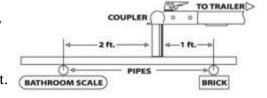
Learn the Towing Basics

It sounds easy – just hitch up and go – but there's a lot more to towing a trailer safely down the road to your play or work destination. This page will help get you started, but for more in-depth information, click on <u>Understanding Towing</u> and go through all the chapter titles. There are a number of towing components to consider, but first you should dive into the alphabet soup of tow ratings, and determine what your vehicle and trailer can handle together. Whether you're pulling a fifth wheel, boat trailer, pop up camper, or a utility trailer, the tow rating considers the size of a trailer or towed vehicle, as well as its maximum loaded weight.

Trailer and vehicle weight codes that you need to know!

- **GVWR** The Gross Vehicle Weight Rating is the maximum a vehicle can weigh, fully loaded with people and cargo.
- **GCWR** The Gross Combined Weight Rating is the maximum the tow vehicle and a trailer together can weigh fully loaded.
- GTW The Gross Trailer Weight is the weight of the trailer and cargo. You can measure this by putting the fully loaded trailer on a vehicle scale. You can search for a certified automated truck scale near you at http://catscale.findlocation.com/
- TW The Tongue Weight is the amount of the trailer's weight that is placed on the hitch ball by the trailer coupler. (To measure the tongue weight, use either a commercial scale or a bathroom scale with the coupler at towing height.

 When using a bathroom scale with heavier



tongue weights, use the method shown and multiply the scale reading by three.

These ratings consider multiple factors, including a vehicle's suspension, frame, and location of the rear axle in relation to the front end. For example, if your truck is rated for 10,000 pounds and you try to tow 15,000 pounds, the additional weight can overtax the rear suspension to the point that you reduce the traction and stability of your front tires. Always refer to your vehicle manual for information about its capabilities and limitations. Check out the quick reference chart below for more information. Remember, the chart illustrated below is only a guide. Make sure you find out the exact towing capacity of both your tow vehicle and your trailer, including all contents and cargo - AND DON'T OVERLOAD.

How much can you safely tow?

Gross Trailer Weight lbs -	1000	2000	3000	4000	5000	6000	7000	8000	10,000	12,000		
Tongue Weight bs -	100	200	300	400	500	600	700	800	1,000	1,200		
1/1		CLASS 1	ľ									
	CLASS 2											
TRAILER TYPE	CLASS 3											
	α								CLASS 4	LASS 4		
										CLASS 5		
Camper	11'	12'	13'	14'	15'	16'						
bs.	1100	1200	1300	1400	1500	1600						
Vacation	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'		
	2100	2400	2700	3000	3300	3600	3900	4200	4500	4800		
Vacation	14'	16'	18'	20'	22'	24'	26'	28'	30'	32'		
0-0010	2800	3200	3600	4000	4400	4800	5200	5600	6000	6400		
5th Wheel							-			-		
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Choosing the right trailer hitch

After you have determined how much weight you will be towing and how much weight your tow vehicle can handle - your next step is choosing the right hitch. The trailer towing industry has developed a classification system - that differentiates hitches according to the amount of weight they can tow. Check out the Hitch Selection Guide diagram below for quick reference. For more information read Types of Hitches.

TRAILERS				Class 4-5 6,000-12,000 lbs. (GTW) 600-1,200 lbs. (TW)		
TOW —	Class 1 2,000 lbs. (GTW) 200 lbs. (TW)	Class 2 3,500 lbs. (GTW) 300 lbs. (TW)	Class 3 3,500-6,000 lbs. (GTW) 350-600 lbs. (TW)			
Subcompact/Compact Cars	Class 1 Receiver					
Mid-Size Cars/Small Pickups	Class 1 Receiver	Class 2 Receiver	Class 3 Receiver W/ Weight Dist. Hitch			
Minivans/SUVs	Class 1 Receiver	Class 2 Receiver	Class 3 Receiver W/ Weight Dist. Hitch			
Full-Size Cars, Pickups, Vans, Utility Vehicles		Class 2 Receiver			Class 4-5 Receiver Hitch	

Types of trailer hitches

The four most common types of hitches are:

• Receiver-style Hitches

Receiver-style hitches are attached under the tow vehicle (usually frame-mounted) and are designed to carry the weight of the trailer (GTW) through the tongue weight of the trailer (TW). The amount of tongue weight that is



carried on the hitch ball and ball mount (attached to the receiver hitch with a pin and clip) is roughly calculated to be between 10%-15% of the GTW. For example, a trailer weighing 2,000 GTW will usually have a tongue weight of between 200-300 lbs. It is this tongue weight that is carried directly on the ball/ball mount. Keep in mind that the TW only accounts for part of the weight rating scheme. You should never tow more that what your hitch and/or vehicle is rated for regardless of the circumstances. Some receiver-style hitches, i.e. 2" receivers, have two gross weight ratings. One for weight carrying and another for weight distribution.

• Weight Distributing Hitch (or load equalizer)

Weight distributing hitches are used in conjunction with with a receiver hitch and special parts that distribute the tongue weight among all tow vehicle and trailer axles. The use of the weight distributing hitch will often lend itself toward higher capacity ratings for the trailer hitches themselves. That said, never tow more than either vehicle is rated for. Remember, weight distribution hitches can help with sway problems a little bit but to elimniate sway, you must purchase a sway control.

• Fifth Wheel Hitch (5th Wheel)

Affords more towing capacity than traditional receiver-style weight distributing hitches. Designed for mounting the trailer connection point in a pickup truck bed, with a kingpin.

• Gooseneck Hitch

Affords more towing capacity than traditional receiver-style weight distributing hitches. Designed for mounting the trailer connection point in a pickup truck bed, with a ball and coupler.

For receiver hitch towing, there are several essential towing components that complete the package; such as the ball mount, hitch ball, coupler, safety chains, wiring, brake controls, hitch pin/lock and sway control. Whether you tow an RV, camper, boat, horses, a race car, snowmobiles, motorcycles, dirt bikes or personal watercraft, you'll want to customize your towing experience with a variety of accessories such as cargo and bike carriers, winches, tie downs and ball covers just to name a few.

Once you've put together and installed your complete tow package you'll want to learn more about <u>Towing Safety</u> before you hit the road.