

Towing Weight Ratings for Explained

I have come to the following conclusion. The most often quoted and most misunderstood and misused rating for our vehicles is the maximum tow rating. These comments are primarily aimed at towing of travel trailers. By travel trailers I mean full-up, hard side trailers not pop-up tent trailers. Though they may apply to other trailers as well.

This number is just an advertising number used by the manufacturer to sell vehicles. What the max weight you should, I will not use the word "can", tow is a rather complicated process of staying within other ratings of your vehicle and trailer. These other ratings are as follows:

Gross Vehicle Weight Rating (GVWR). This is the maximum total weight for your vehicle. It includes the weight of the vehicle and all cargo. Including all occupants, cargo, and a full tank of gas. By the way the weight of the vehicle includes any modifications you made to it that have increased its weight. Also see Tongue Weight (see below), it is included in the cargo number when towing.

Gross Vehicle Weight Rating (GVWR) of the trailer. This is the maximum weight of the trailer ready for travel. Including battery, Propane, and any water in the tanks.

Gross Combined Vehicle Weight Rating (GCVWR). This is the maximum weight of both the truck and the trailer hook up and ready to roll down the road.

Tongue Weight Rating (TWR). This is the maximum combined weight of the trailer on the hitch ball and the weight of any Hitch equipment inserted into the receiver on the truck. This means the hitch drop bar, the ball and any components of the Weight Distribution hitch and added friction sway bar if used. Oh, by the way the actual value of tongue weight should be between 10 and 15 percent of actual trailer weight. Also changing or installing a hitch with a higher rating does not change the rating of the vehicle.

Now for a couple you may not have heard of or thought about.

Front Axle Weight Rating (FAWR) and Rear Axle Weight Rating (RAWR). These are the rating of the loading of the axles on the truck. These are the maximum loading the axles should see when fully loaded. Heavier springs, helper springs or air bags DO NOT change these ratings, despite what some people say. They are found on the driver's door sticker.

Trailer Axle Weight Rating (TAWR). This is the axle weight rating for the trailer. It is found on the trailer manufacturers sticker with the dry weight from the factory, GVWR and tire information.

These ratings also have actual values to them, that are used to calculate if you are below the ratings. Getting the actual values for these weights requires taking the complete rig loaded for travel to a CAT scale and getting multiple readings hooked and unhooked. Thankfully if you are sufficiently under all the ratings you only need to do it once unless you make major changes to your setup.

Now with all these ratings explained, and they are ratings not some advertising number. You can see the juggling act that is required to stay within all of them when pulling a large TT. They all interact with each other and may in fact affect/limit some others. That advertising number of max towing capacity is really a best case number that may not apply in all cases.