



## **WHY YOU SHOULD WEIGH YOUR RV**

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This topic is regularly discussed in RV publications and around the campfire. So, why would anyone want to weigh their RV? The best reason I know of is Safety. According to the National Highway Traffic Safety Administration (NHTSA), under inflated tires are the leading cause of tire failure, which accounts for 660 fatalities and 33,000 injuries each year. When I read that for the first time it really got my attention. I started learning about weight and balance as well as tire maintenance for RV's and came across the following data from the RV Safety Education Foundation (RVSEF). They found that out of all the RV's they weighed 33% had overloaded tires. Twenty-two percent of all rear tires were overloaded and 28% of all motorhomes were out of balance side-to-side by 400 pounds or more. In a separate survey done by Bridgestone/Firestone Tire they found that 4 out of 5 RV's had at least one underinflated tire. One third of those were extremely underinflated and at risk of failing.

Did you know that a properly mounted tire, in good condition and properly inflated can lose between 1 and 2 lbs. of inflation pressure per month right through the sidewalls. It gets worse if you have a bad valve stem or seal between the tire and wheel. You could even have a slow leak caused by a nail in your tire. If your tire is just 20% low on its required psi it is considered flat and could be damaged internally if you drive on it. If you have such a condition you should take the tire to a reputable truck tire shop where they will dismount the tire and inspect it for possible structural damage.

An underinflated tire cannot carry the load it was designed for and will suffer from excessive heat build-up which could lead to sudden tire failure. Underinflation also will also cause poor handling, faster tire wear, irregular tire wear and lower fuel mileage. Overinflation will reduce the tires footprint on the pavement which will reduce traction, braking ability and handling. An overinflated tire will also ride much more roughly, produce uneven tire wear and be more susceptible to impact damage from pot holes and other road hazzards.

Another thing to consider is that the Gross Axle Weight Rating (GAWR) is based on the weakest component in the suspension system. That system is made up of items like tires, brakes, wheels, bearings, springs, air bags, linkage etc. An RV is the only vehicle that is operated at 100% capacity all the time. That's right, even the big 18 wheelers are not fully loaded all the time. If your RV is overloaded you are asking some of its components to do more work than they were designed for. If one of these components fails it could leave you stranded on the side of the road for hours with traffic zooming by just a few feet away or worse as it could cause an accident.

One final aspect of an overweight RV: the legal concerns if you are involved in an accident. Most insurance companies, lawyers and law enforcement officers know that it is very common for an RV to be overloaded. Even if you are not at fault, just involved, an overweight condition could lead to a negative verdict as the overweight condition could be viewed as a contributing factor. Your share of liability could increase. Your insurance company could cancel coverage if you were operating the vehicle in violation of the ratings on the federal data plate in your RV. Not good!

The best way to protect your family and investment is to know how much your RV actually weighs. It is important to learn if your rig falls within the Gross Vehicle Weight Rating (GVWR) as well as the individual GAWR's. If you weigh the whole thing at once it's possible to be within the GVWR but over on an axle or one end of an axle and you wouldn't know it. Weighing each wheel position will give you the best information on how your weight is distributed on each axle and each side of the RV. Once you know how much weight each tire is carrying you can look up the proper inflation pressure on the tire manufacturer's web site. Of course, if your RV is overweight or out of balance you must put it on a diet and/or rebalance the load. We'll discuss how to deal with that in another article. Safe travels! ©2011-2016