## How close to 'Max Load' is OK for RV tire inflation?

ByRoger Marble on RVTravel.com

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Many times people point to regulations for tire inflation and state that RV companies select the tire inflation. They conclude that is what we should run because they think that is the "optimum" or "best" inflation.

Well, the reality is that the tire "Load & Inflation" tables actually are giving you the MINIMUM inflation needed to support the stated load.

We need to remember that the load on your tires is not your estimate or the load your brother-in-law has in his RV. It is the actual measured load that you can only learn by getting *your* RV on a truck scale in the condition you expect to travel.

## Here is a comment on tire load capacity:

You might have a valid point if the discussion were about OEM tires. However, this discussion is about new tires on an existing RV. The owner should go through the process that the RV manufacturer did when determining tire pressures. Tire pressures should be set based upon the tires and their actual loads.

Unfortunately, RV manufacturers don't have actual load information, so they base pressures on an estimate of the max load. The RV owner has (or should get) information that the manufacturer does not have, i.e., the actual load. That information should be used to help you determine the MINIMUM cold inflation.

## What the inflation numbers on Load tables actually refer to

As an actual tire engineer, I would be happier if people understood that the inflations given in the Load tables are the MINIMUM needed to support the stated load.

In the non-RV world, tire inflation is not based on the minimum needed to support the load. You will find that most cars have an inflation that provides a **Reserve Load** of 20% to 30% or more. That is one reason car tires have much lower failure rate than tires in RV application.

Some people want to believe that all is good as long as you meet the minimum standard, then they are surprised when tires fail. Well, they fail due to the cumulative damage done to the structure. This damage reduces the load capacity because damage weakens the structure.

It has been shown that a hard hit from a pot hole can effectively "kill" a tire with the only question being how long can you travel before it finally dies. I have also posted that you can hit a pot hole hard enough to "fatally" damage a tire yet have no recollection of the hit.

## "Red line" considerations

Your car or truck has an engine "red line." Think for a moment about how long your engine would live if you ran it at 95-98% of red line speeds all the time. Well, that red line is like the inflation number in the tables in reverse.

Running an engine at the red line is like running the tires at the maximum load capacity for your tires as shown in the tables.

I bet most of you run no higher than 75-80% of red line on your engine, if that high. That gives you a 20% reserve. Maybe you should consider doing the same for your tires.

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