

# YOUR RV'S TIRES

## *The Function of Your RV Tire*

The tire designed for your RV is a highly technical and meticulously engineered product. To maximize performance and ensure optimal service from your tires, it's essential to grasp their function. A tire acts as a "container" that holds air, and it is the combination of this air and the tire itself that supports both the vehicle and its contents. Furthermore, since the tire is the sole point of contact between the vehicle and the road surface, it must also fulfill additional roles, such as:

- Providing traction for movement, stopping, and steering
- Absorbing shocks and bumps from the road to enhance comfort for passengers
- Dispersing heat generated by friction with the road to prevent overheating
- Ensuring stability and balance, especially in varying weather conditions

Understanding these functions highlights the importance of regular tire maintenance. This includes not only monitoring tire pressure but also checking for tread wear, inspecting for cuts or punctures, and ensuring proper alignment and balance. Neglecting these aspects can compromise the tire's ability to perform its vital roles, potentially leading to unsafe driving conditions.

## *The Importance of Tire Pressure*

The key to extending the life of your tires lies in maintaining proper inflation. Driving on tires that are not correctly inflated for your vehicle's load can be hazardous and may lead to premature wear, tire damage, or even loss of control.

### **Underinflation Risks**

- Causes excessive heat buildup, potentially exceeding the rubber's and radial cords' endurance limits, which may lead to sudden tire failure.
- Results in poor vehicle handling, rapid or uneven tire wear, and increased rolling resistance, ultimately decreasing fuel economy.

### **Overinflation Concerns**

- Reduces the tire's contact patch with the road, compromising traction, braking capacity, and overall handling.
- Can lead to a harsh ride, uneven tire wear, and greater susceptibility to impact damage.

Maintaining the correct tire inflation pressure for each loaded wheel position on your vehicle is essential and should be a regular part of your vehicle maintenance routine. Regularly checking and adjusting tire pressure not only ensures safety but also enhances driving comfort and efficiency.

### **To achieve this, consider these practical tips:**

1. Use a Reliable Tire Pressure Gauge - Invest in a high-quality gauge to ensure precise readings. Digital gauges are often more accurate and easier to use than analog models.
2. Check Tire Pressure When Cold - Tire pressure should be measured when the tires are cold, ideally before driving your RV, as heat from driving can cause air to expand, leading to inaccurate readings.
3. Follow Manufacturer's Guidelines - Always refer to your RV manufacturer's specifications for the recommended tire pressure, which might differ from the tire's maximum pressure rating.
4. Regular Inspections - Make tire inspections part of your routine, checking not only pressure but also for signs of wear or damage. Look for nails, cuts, or bulges that could indicate underlying issues.
5. Consider Tire Pressure Monitoring Systems (TPMS) - These systems provide real-time pressure readings and warnings, offering peace of mind especially on long journeys.

By incorporating these practices into your maintenance schedule, you can significantly reduce the risk of tire-related incidents and enjoy smoother, safer travels. Remember, well-maintained tires contribute not only to your safety but also to the overall performance and efficiency of your RV.

*Coachcraft*  
BY MacDONALD

# YOUR RV'S TIRES

## Identifying the Correct Tire Pressure

Federal law mandates that the maximum load rating of tires be molded into the sidewall. If you examine your tire's sidewall, you will find the maximum load permitted for that tire size, along with its load rating and the minimum cold air inflation pressure required to support the stated maximum load.

Lower Air Pressure:

Using less air pressure reduces the load capacity of the tire.

Driving an overloaded RV poses several risks, including:

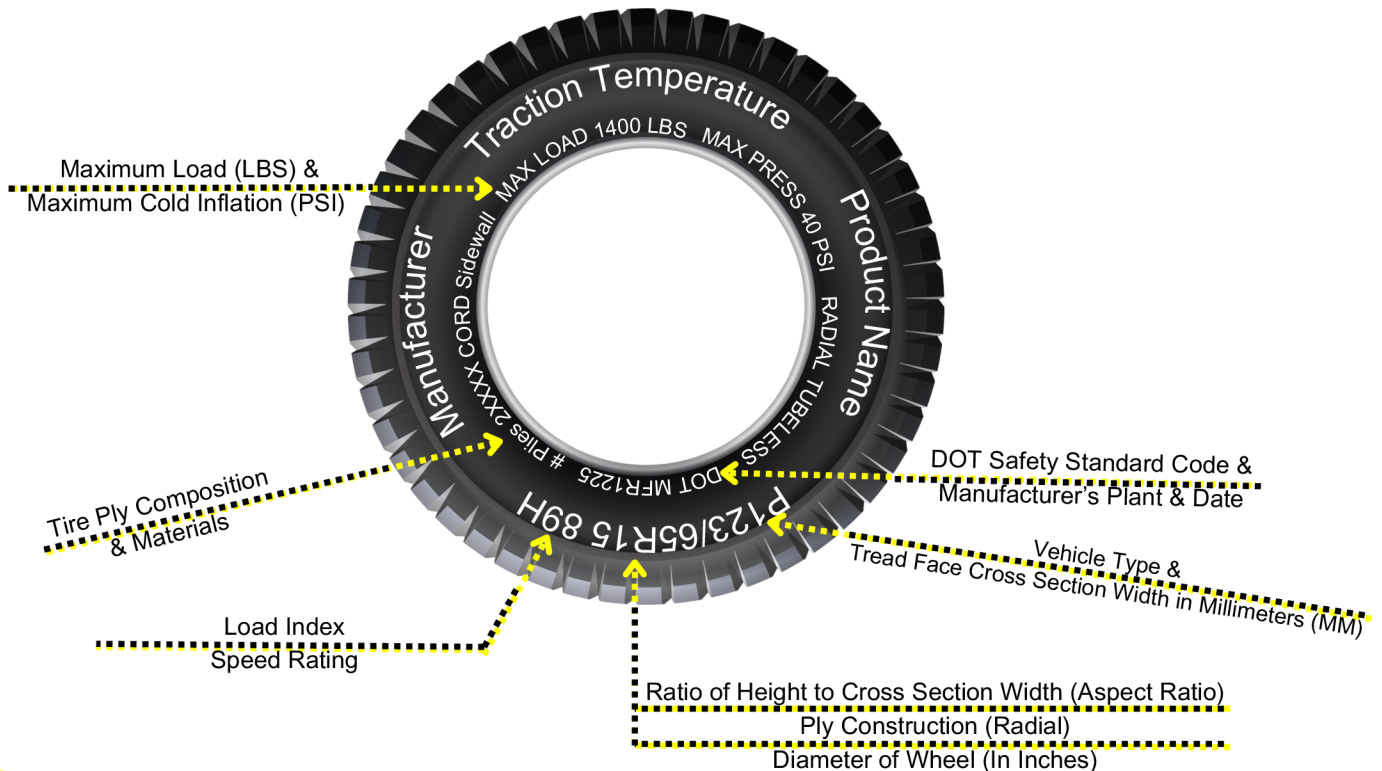
- Potential issues with tires, wheels, and springs.
- Increased likelihood of brake failure, drivetrain failure, and wheel bearing failure.
- An overloaded RV consumes more fuel.
- It is more challenging to maneuver, which can lead to driver fatigue.
- Should any component fail, it may result in vehicle damage or a loss of control.

In addition to these hazards, some states require specific motorhomes and RVs to weigh in at highway patrol weight scales to check for overloaded axle weights. Violators may receive citations.

Determining Air Pressure:

The appropriate air pressure depends on the weight of your fully loaded vehicle. Therefore, you cannot accurately determine the correct air pressure without knowing your vehicle's actual weight.

## Important Tire Information



**Coachcraft**  
BY MacDONALD

# YOUR RV'S TIRES

## Identifying the Correct Tire Pressure

Tire Load limits (LBS) at various cold inflation pressures (PSI) highway steer & all position tread designs used in normal highway services

Tire Size	Single (S)	Inflation Pressure - PSI																
	Dual (D)	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	
LT215/75R15	S	1345	1475	1900	1765 (C)	1845	1960	2095 (D)										
	D	1225	1340	1455	1610 (C)	1680	1785	1930 (D)										
LT235/75R15	S	1530	1680	1825	1895 (C)	2100	2230	2335 (D)										
	D	1390	1530	1660	1820 (C)	1910	2030	2150 (D)										
LT225/75R16	S	1500	1650	1790	1940 (C)	2060	2190	2335 (D)	2440	2560	2680 (E)							
	D	1365	1500	1630	1765 (C)	1875	1995	2150 (D)	2200	2330	2470 (E)							
LT245/75R16	S	1700	1885	2030	2205 (C)	2335	2480	2623 (D)	2765	2900	3042 (E)							
	D	1545	1695	1845	2006 (C)	2125	2255	2381 (D)	2515	2640	2778 (E)							
LT215/85R16	S	1495	1640	1785	1940 (C)	2050	2180	2335 (D)	2430	2550	2680 (E)							
	D	1360	1490	1625	1765 (C)	1865	1985	2150 (D)	2210	2320	2470 (E)							
LT235/85R16	S	1700	1870	2030	2205	2335	2485	2623 (D)	2765	2905	3042 (E)	3170	3300	3415	3550	3675	3750 (G)	
	D	1545	1700	1845	2006	2125	2260	2381 (D)	2515	2645	2778 (E)	2885	3005	3085	3230	3345	3415 (G)	

## Calculating Tire Inflation

### Equation:

Tire Weight / Tire Pressure = Load Capacity (In pounds per square inch or PSI)

### Example:

Based on the chart above, a LT215/85R16 Single at 60 PSI should carry a 2,180 LBS load.

### To calculate this manually:

2180 / 60 PSI = 36.33 pounds of carrying capacity per PSI.

36.33 x 60 PSI = 2,180 Load Capacity