

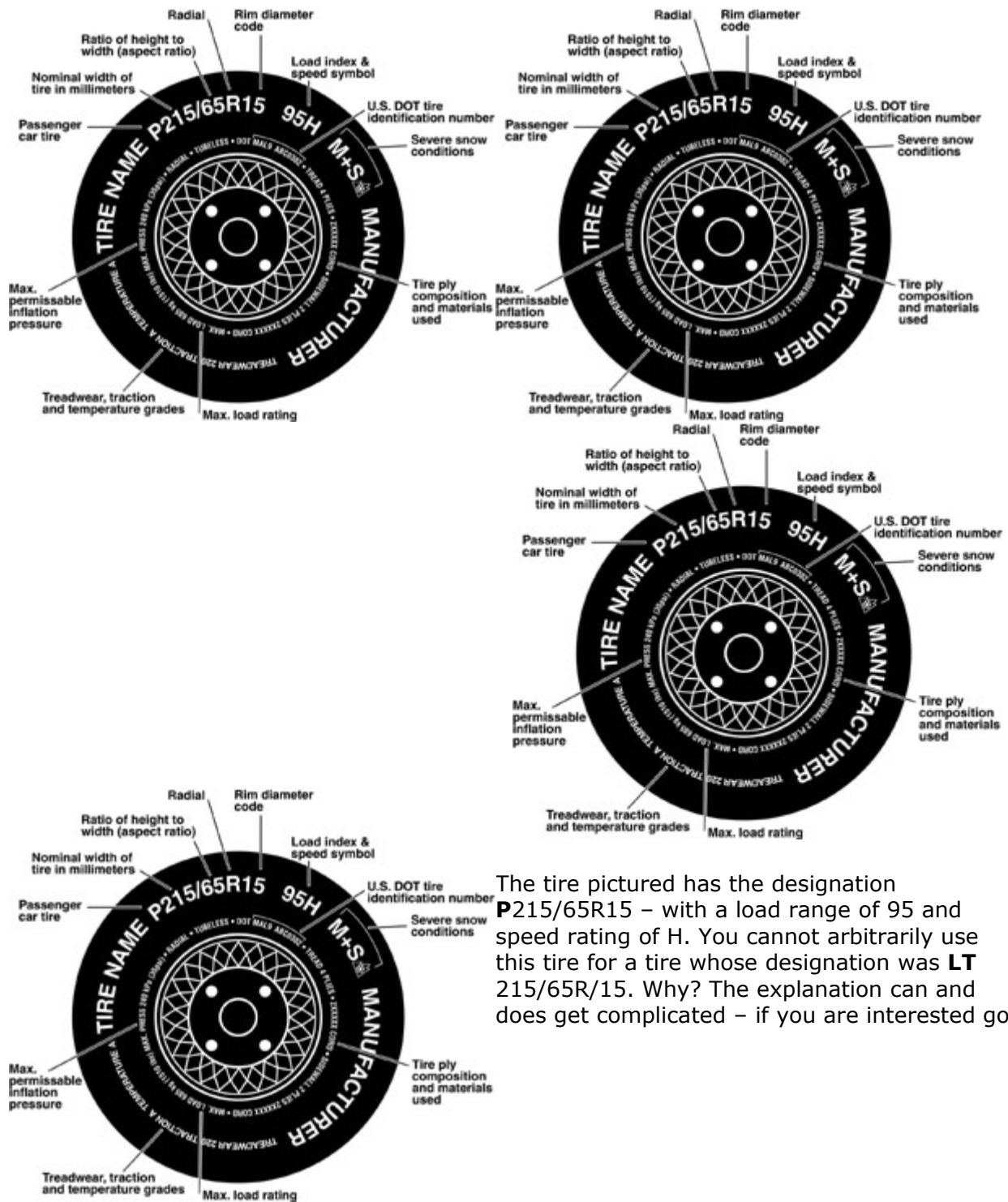
Basic Tire Information

Where the rubber meets the road...

Tony Scotti

Remember that the only connection between you and mother earth is your tires. Treat them well. The important issues are type of tires and the air in the tire. Keep in mind that the tire doesn't support the vehicle load. The pressurized air inside the tire supports the load. The tire is just the container this might sound obvious, but it is critical to understand.

If you are driving a SUV or an armored SUV the tires should start with the letters LT – which mean Light Truck. Often Light Truck (LT) tires will be replaced with Passenger tires of the same size.

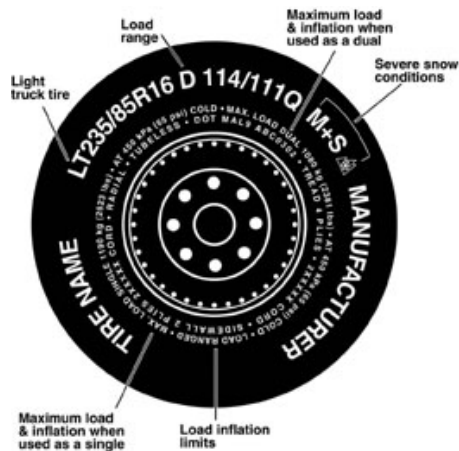


The tire pictured has the designation **P215/65R15** – with a load range of 95 and speed rating of H. You cannot arbitrarily use this tire for a tire whose designation was **LT 215/65R/15**. Why? The explanation can and does get complicated – if you are interested go

to the site listed below – it will give you detailed information.
http://www.goodyear.com/truck/pdf/databook/5113_Lsec_V.pdf

Anyone who is responsible for the safety and security of the passengers in their vehicle should understand tire loads. You can put yourself and everyone else in the vehicle in a tough spot by not paying attention to vehicle loading. You will find the tire load written on the side of the tire, and it is the air in the tire determines the amount of weight you can carry in the car. The combination of speed – heavy load – low tire pressures is a recipe for blowouts and flats.

Check your tire pressures when the tires are cold - understand that for every 10 degree increase (F) in temperature the tire pressure goes up 1 PSI. Combine that with a heavy loaded vehicle and it is a disaster looking for a place to happen.



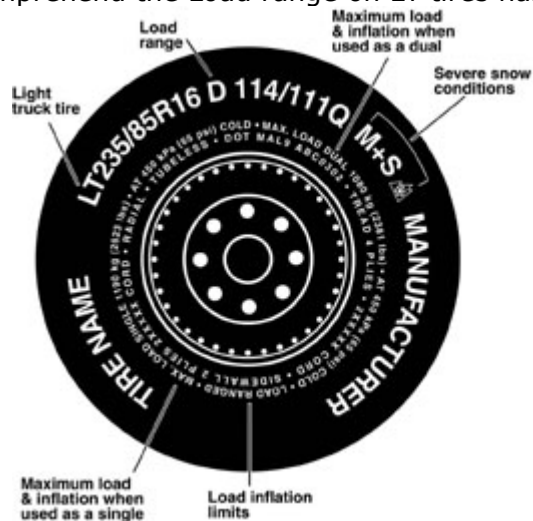
LOAD RANGE

The amount of weight the tire can accept - depends on the amount air in the tire. The tire will have a load rating stamp on the tire. There is a table at the end of this segment that will give you the amount of weight that correlates to the number. As an example in the above picture the load range is 95 if you go to the table 95 corresponds to 1521 pounds or 690 Kilos. That means with maximum air pressure- that number is also found on the tire – the table shows this tire can accept 1521 pounds on it.

For a reason that I have never been able to comprehend the Load range on LT tires has a different designation.

Look at the drawing on the right and you will notice the load range designation is a letter instead of a number. Why? I don't know – if you go on the Goodyear site mentioned above it has an explanation. But as a quick reference look at the table to the left. The tire pictured has a load range of D which mean it is a load range of 110 which means it can take 2337 pounds on it.

What do you take away from all this? Check your tires and insure that they are the correct



designation – if it is armored it should have a LT tire on it. Make sure the tire can take the weight that's on it, if it cannot take the weight you are asking for a blowout.

TIRE PRESSURE HINTS

Most manufacturers recommend checking tire pressures weekly or monthly but I would suggest checking them daily

If you are not sure what to put in for tire pressure the vehicle manufacturer's recommendation is always a good starting point. It will be somewhere in the car, or on the sticker in the driver's door jamb, but more and more it's located on the back of the gas filler door. If that fails, the information should be in the owner's manual. Sometimes, there will be a range specified, or two different recommendations, depending on load. Anywhere between these numbers should be safe.

Table Seven					
load index	lb	kg	load index	lb	kg
71	761	345	97	1,609	730
72	783	355	98	1,653	750
73	805	365	99	1,709	775
74	827	375	100	1,764	800
75	853	387	101	1,819	825
76	882	400	102	1,874	850
77	908	412	103	1,929	875
78	937	425	104	1,984	900
79	963	437	105	2,039	925
80	992	450	106	2,094	950
81	1,019	462	107	2,149	975
82	1,047	475	108	2,205	1,000
83	1,074	487	109	2,271	1,030
84	1,102	500	110	2,337	1,060
85	1,135	515	111	2409	1093
86	1,168	530	112	2484	1127
87	1,201	545	113	2581	1171
88	1,235	560	114	2640	1197
89	1,279	580	115	2721	1234
90	1,323	600	116	2806	1273
91	1,356	615	117	2892	1312
92	1,389	630	118	2962	1343
93	1,433	650	119	3074	1394
94	1,477	670	120	3169	1437
95	1,521	690	121	3257	1477
96	1565	710	122	3307	1500

If you know the vehicles weight and weight distribution you can determine if you have the correct tires and what the tire pressures should be. To illustrate lets say we have a vehicle that weights 7000 lbs. Its weight distribution is 60% front and 40% rear. You can get weight distributions on the web at www.autosite.com in our example there would be 7000 x .6 or 4200 lbs on the front of the car shared by the two tires – so 2100 lbs on each tire. And 7000 x .4 or 2800 lbs on the rear tires again shared by two tires so 1400 lbs on each tire. Looking at table seven you would need a load range 110 or above tire or Load range E on a LT tire. Why the extra rating - under braking, weight will transfer from the back of the vehicle to the front. We need to leave room. If you go to the Goodyear site mentioned above you will find (have to do some digging) what the recommended tire pressure is for that load range.