

TIRE INFORMATION

SPEED RATING

The speed rating of a tire is based on government standards for reaching and sustaining a specified speed in a laboratory test that simulate road performance. Speed ratings apply to the tire, not the vehicle. You should not exceed the speed rating of the lowest rated tire.

B - Up to 31 mph	P - Up to 94 mph
C - Up to 37 mph	Q - Up to 100 mph
D - Up to 40 mph	R - Up to 106 mph
E - Up to 43 mph	S - Up to 112 mph
F - Up to 50 mph	T - Up to 118 mph
G - Up to 56 mph	U - Up to 124 mph
J - Up to 62 mph	H - Up to 130 mph
K - Up to 68 mph	V - Up to 149 mph
L - Up to 75 mph	W - Up to 168 mph
M - Up to 81 mph	Y - Up to 186 mph
N - Up to 87 mph	Z - 149 mph +

LOAD INDEX

A two or three digit number that indicates the weight a tire can support when inflated to specified tire pressure. If two numbers are present, like a fraction, it indicates the weight in a single tire and dual tire application.

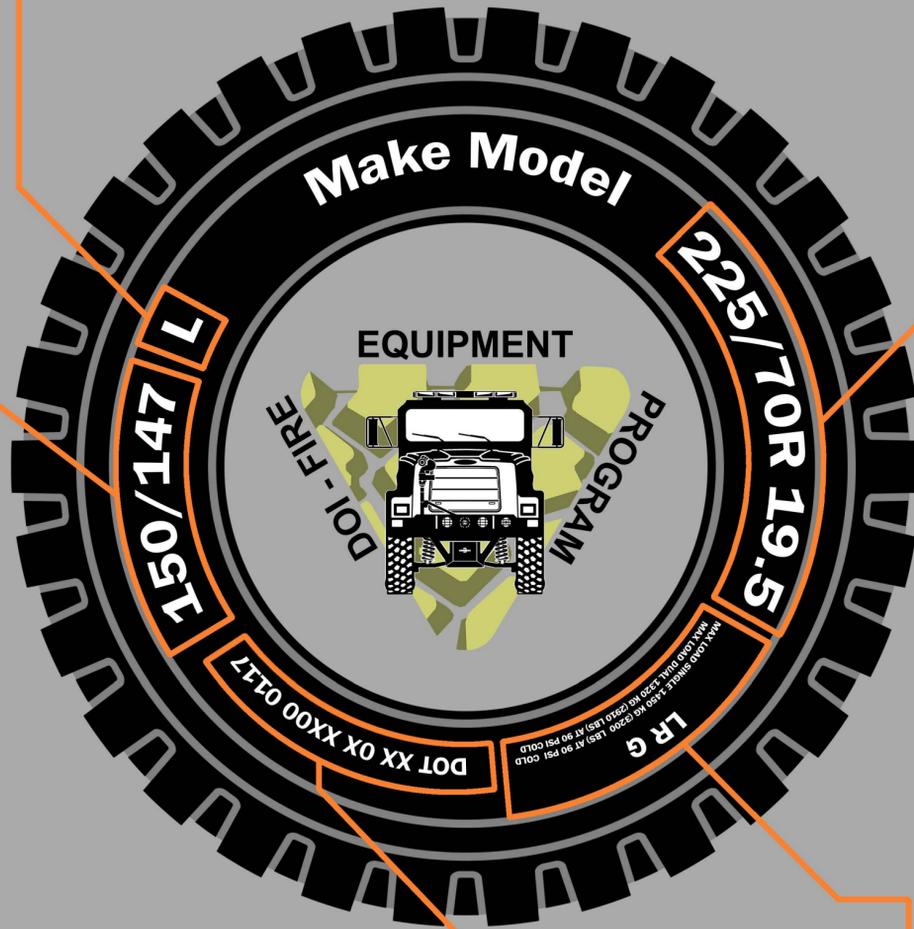
Example 150/147 = SINGLE TIRE / DUAL TIRES

Load Index	Load Kg	Load lb	Load Index	Load Kg	Load lb	Load Index	Load Kg	Load lb
85	515	1140	115	1215	2680	145	2900	6400
86	530	1170	116	1250	2760	146	3000	6600
87	545	1200	117	1285	2830	147	3075	6800
88	560	1230	118	1320	2910	148	3150	6950
89	580	1280	119	1360	3000	149	3250	7150
90	600	1320	120	1400	3080	150	3350	7400
91	615	1360	121	1450	3200	151	3450	7600
92	630	1390	122	1500	3300	152	3550	7850
93	650	1430	123	1550	3420	153	3650	8050
94	670	1480	124	1600	3520	154	3750	8250
95	690	1520	125	1650	3640	155	3875	8550
96	710	1570	126	1700	3740	156	4000	8800
97	730	1610	127	1750	3860	157	4125	9100
98	750	1650	128	1800	3960	158	4250	9350
99	775	1710	129	1850	4080	159	4375	9650
100	800	1760	130	1900	4180	160	4500	9900
101	825	1820	131	1950	4300	161	4625	10200
102	850	1870	132	2000	4400	162	4750	10500
103	875	1930	133	2060	4540	163	4875	10700
104	900	1980	134	2120	4680	164	5000	11000
105	925	2040	135	2180	4800	165	5150	11400
106	950	2090	136	2240	4940	166	5300	11700
107	975	2150	137	2300	5080	167	5450	12000
108	1000	2200	138	2360	5200	168	5600	12300
109	1030	2270	139	2430	5360	169	5800	12800
110	1060	2340	140	2500	5520	170	6000	13200
111	1090	2400	141	2575	5680	171	6150	13600
112	1120	2470	142	2650	5840	172	6300	13900
113	1150	2540	143	2725	6000	173	6500	14300
114	1180	2600	144	2800	6150	174	6700	14800

GENERAL INFORMATION

The only information required to be molded in to the sidewall of a tire is the Tire Identification Number (TIN), other information is up to the manufacturers' discretion. Contact the manufacturers for information not found on sidewall.

Specific vehicle tire specifications can be found on the vehicle data sticker in driver-side door area and owner's manual. Tires must meet these specifications.



TIRE SIZING SYSTEMS

There are several tire sizing systems used by tire manufacturers. Below are examples of the most common used in the US.

METRIC

Light Section Radial
Truck Width (mm) Construction
LT 285/70 R 17
225/70 R 19.5
P 215/70 R 14
Passenger Aspect Rim
Car Ratio Diameter

This system shows the tire dimensions, construction, and can have a prefix to denote the specific application the tire is designed for.

Prefixes

Note - A tire without a specific application prefix can be called a "Euro Metric" tire.

- LT** - Light Truck applications
- P** - Passenger cars and SUVs applications
- T** - For use as a Temporary spare tire
- ST** - For use only for Special Trailer Service and should never be used on a car or truck

ISO METRIC

Aspect Rim Speed
Ratio Diameter Rating
225/70 R 19.5 128 L
Section Radial Load
Width (mm) Construction Index

International Standards Organization (ISO) Metric system combines the Metric sizing system with a service description. The service description provides the load index and speed rating.

LIGHT TRUCK NUMERIC

Tire Radial Light
Diameter (in) Construction Truck
31 X 10.5 R 15 LT
Section Rim
Width (in) Diameter

Note: High flotation truck tires are not recommended for heavy loads because of soft sidewalls and should not be used on fire vehicles.

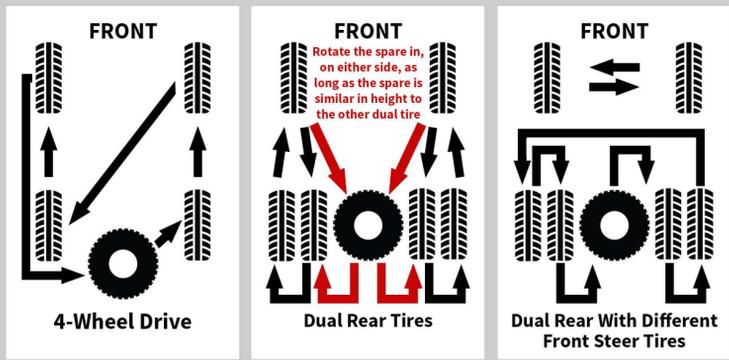
COMMERCIAL TRUCK - STANDARD

11 R 22.5
Section Radial Rim
Width (in) Construction Diameter

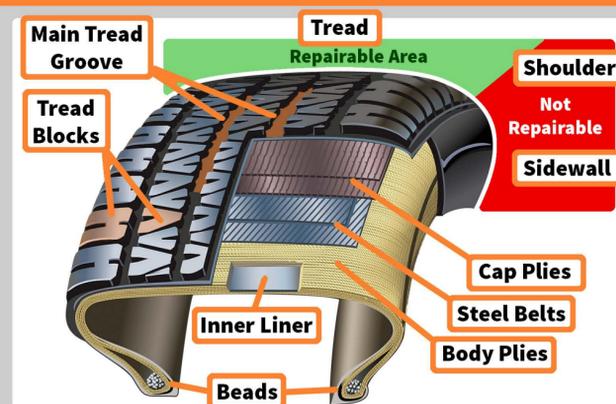
Truck tire sizes have a specific aspect ratio of the Section Width to Rim-To-Tread Height. The formula for a standard tire is 88% of the Section Width is the Rim-To-Tread Height. The example above would have a height of ~9.7 inches.

TIRE ROTATION DIAGRAMS

Tires on the same axle should be the same tread pattern with similar wear.



TIRE ANATOMY



TIRE DAMAGE - REQUIRES REPLACEMENT

Sun and age cracking (sun-rot)



Gouge and cut in sidewall with cords exposed



Missing tread blocks (chunking) with cords exposed



Blister inside the tire from driving on it while it was under inflated



LOAD RANGE

Load Range identifies the tire load-carrying capabilities, inflation limits, and corresponds to a ply-rating. The Load Range uses a broad scale so the tire Load Index should be used if available.

Ply ratings do not count the actual number of body ply layers used to make up the tire's internal structure, but indicate an equivalent strength compared to early bias ply tires.

MEASURING TREAD DEPTH

Measure in a main tread groove.

Do not place the gauge on molded tread wear bars or raised portions of tire tread.

Replace tires if tread is less than 4/32 of an inch.

