

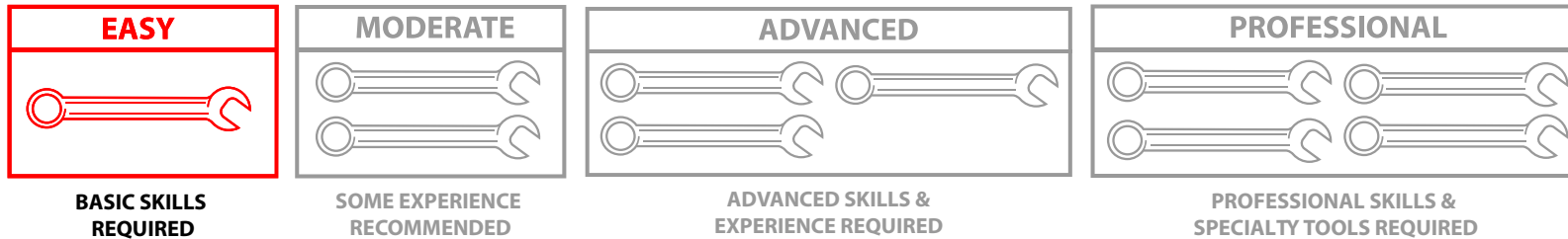


Tire Sizing & Ratings - All Makes & Models



Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

INTRODUCTION



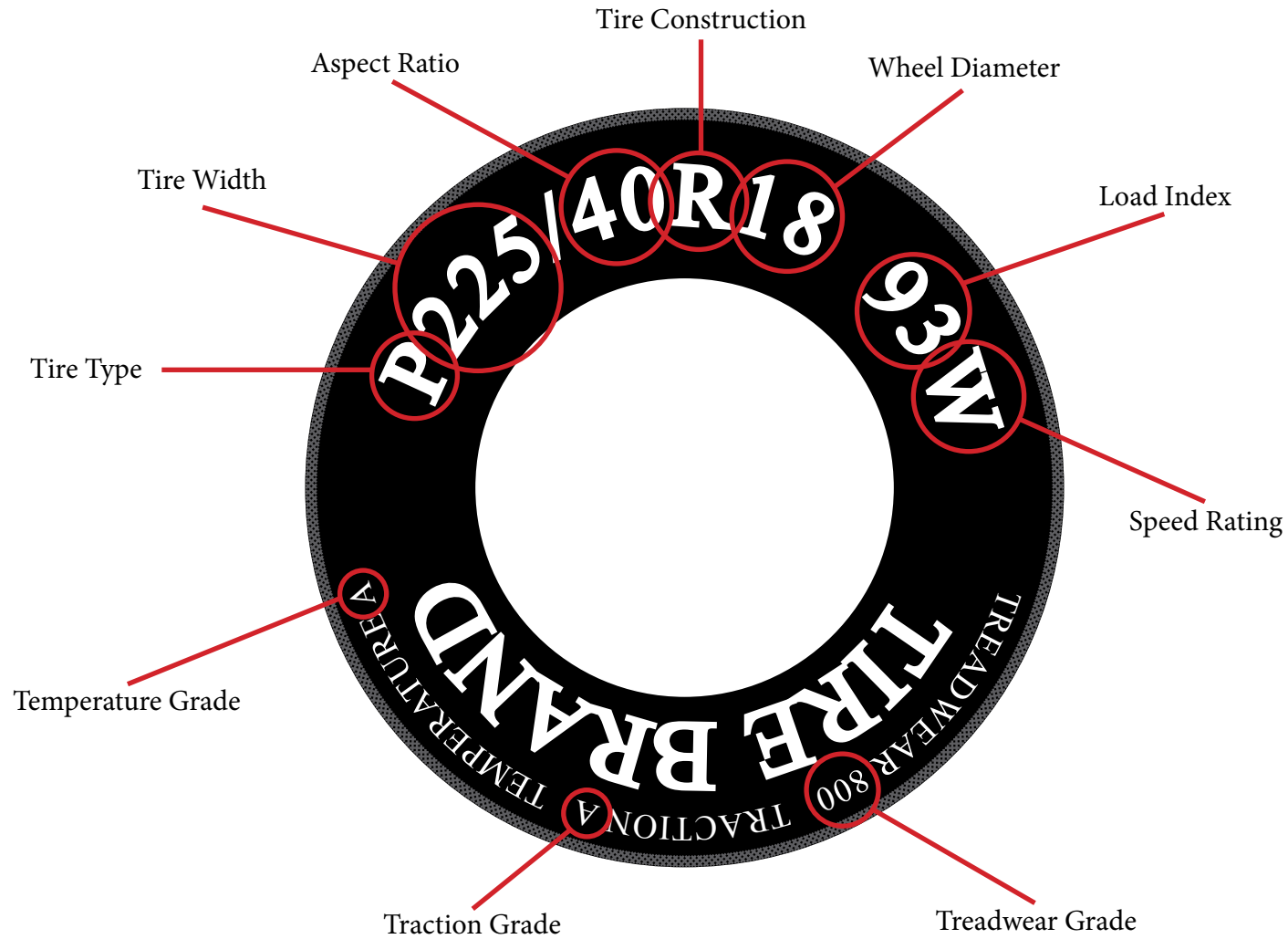
This PDF has been created for informational purposes to help answer any questions you might have on tire sizing and ratings (Passenger Car tires only). After reading this PDF you will understand:

- * What is printed on the sidewall of a tire
- * How to quickly read and understand tire ratings
- * How to determine the speed and load ratings of a tire
- * How to use all of this knowledge to find the appropriate tire to fit your needs and your vehicle

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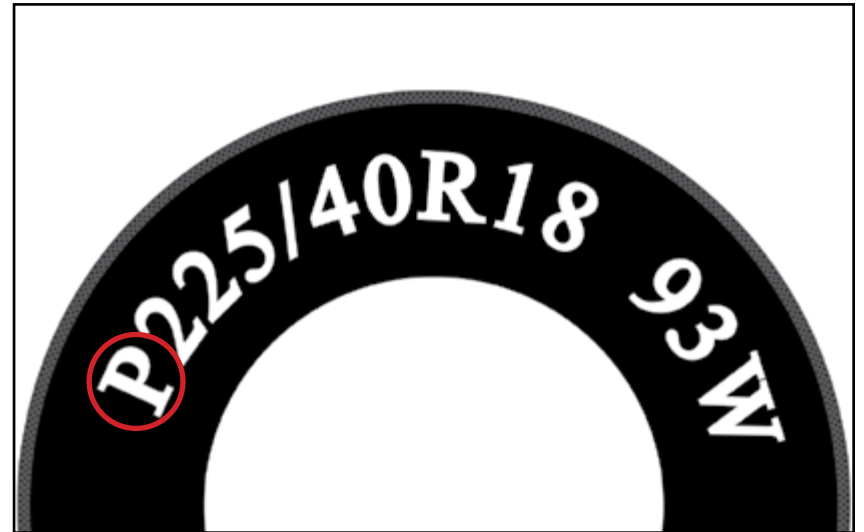
WHAT'S ON YOUR SIDEWALL?



HOW TO READ THE SIDEWALL OF A TIRE

Tire Type:

The letter "P" at the beginning of the tire code tells us that this is a tire which is made to the required specifications to be used on passenger cars in the United States. Other examples of tire types include "LT" for Light Truck tires, "ST" for Special Trailer, and "T" for Temporary tires (more commonly known as "donut" or "space saver" spare tires).



Tire Width:

The three-digit number following the tire type code is the width of the tire measured in millimeters from sidewall to sidewall. The tire in the example has a width of 225mm.

TECH TIP

You can convert the width measurement from millimeters to inches by dividing the width by 25.4. For example: $225\text{mm} / 25.4 = 8.86"$



HOW TO READ THE SIDEWALL OF A TIRE

Aspect Ratio:

The two-digit code following the slash mark is the aspect ratio of the tire. This number represents the relationship between the width of the tire and the height of the sidewall. For example: The tire shown has a width of 225mm, and the aspect ratio is 40%. To calculate the height of the sidewall we multiply the width by the aspect ratio: $225 \times 40\% (0.40) = 90\text{mm}$.

TECH TIP

You can convert the sidewall height from millimeters to inches by dividing the height by 25.4. For example: $90\text{mm} / 25.4 = 3.54''$

Tire Construction:

The letter code following the aspect ratio identifies the tire's internal construction. In our example, we see the letter "R", which means this tire has a Radial construction. Radial tires are the most popular type of tire sold today representing over 90% of all tires sold.



HOW TO READ THE SIDEWALL OF A TIRE

Wheel Diameter:

The two-digit number after the tire construction code tells us the diameter of wheel that the tire is designed to fit on.



Load Index:

This number indicates the maximum load that the tire is rated to support when properly inflated. The maximum load capacity can also be found printed on the tire sidewall, and it will be in both pounds and kilograms. To see a chart with the most common load indexes and their capacity, please see page 10.



HOW TO READ THE SIDEWALL OF A TIRE

Speed Rating:

The speed rating tells you the maximum speed the tire is capable of operating at. Usually speed ratings are matched to the top speed capability of the vehicle. To see a chart with the most common speed ratings please see page 10.



Treadwear Rating:

This number is based upon standardized government tests which help to predict the expected treadwear of a tire. For example, a tire which has a treadwear rating of 200 is expected to last twice as long as a tire which has a treadwear rating of 100.



HOW TO READ THE SIDEWALL OF A TIRE

Traction Grades:

Traction grades are used to rate the wet traction of a tire under a controlled test. These grades range from "AA - C", "AA" rated tires offer outstanding wet traction, while "C" rated tires offer the least amount of wet traction.



Temperature Grades:

Temperature grades indicate the ability of the tire to withstand and dissipate the destructive heat that comes from operating at higher speeds. A tire with an "A" temperature grade is able to operate at higher speeds than a tire with a "B" or "C" grade.



LOAD INDEX RATINGS:

Load Index	Pounds	Kilograms
71	761	345
72	783	355
73	805	365
74	827	375
75	853	387
76	882	400
77	908	412
78	937	425
79	963	437
80	992	450
81	1019	462
82	1047	475
83	1074	487
84	1102	500

Load Index	Pounds	Kilograms
85	1135	515
86	1168	530
87	1201	545
88	1235	560
89	1279	580
90	1323	600
91	1356	615
92	1389	630
93	1433	650
94	1477	670
95	1521	690
96	1565	710
97	1609	730
98	1653	750

Load Index	Pounds	Kilograms
99	1709	775
100	1764	800
101	1819	825
102	1874	850
103	1929	875
104	1984	900
105	2039	925
106	2094	950
107	2149	975
108	2205	1000
109	2271	1030
110	2337	1060

SPEED RATINGS:

Letter	MPH	KPH
L	75	120
M	81	130
N	87	140
P	93	150
Q	99	160
R	106	170
S	112	180

Letter	MPH	KPH
T	118	190
U	124	200
H	130	210
V	149	240
W	168	270
Y	186	300
Z	149+	240+

You Are Ready To Find The Perfect Tire To Fit Your Needs!



These instructions are provided as a courtesy by ECS Tuning.

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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