

# TIRE SIZE EXPLAINED



**Tire Width** – This three-digit number represents the width of the tire's footprint from shoulder to shoulder measured in millimeters. In this case, the tire width is 245 mm.

**Aspect Ratio** – The second number is the height of the sidewall measured as a percentage of the tire width. When the aspect ratio is 70 that means the sidewall height is 70% of the tire width.

**Rim Diameter** – The last number of the tire size indicates the size of the wheel needed for the tire. This is measured in inches from bead to bead across the face of the wheel. Here the tire has to be mounted on a 17-inch wheel

**Load Index** – The load index is the number that shows the load durability of a specific tire, determined by the tire size and the psi levels. Tires with higher load indexes can handle larger loads.

**Speed Index** – The speed rating is the letter located after the load index. It represents the maximum speed a tire can safely handle without the possibility of tire failure.

Wheel Diameter =  $2(\text{Tire width(mm)} \times \text{Aspect ratio} / 25.4) + \text{Wheel height}$ .  
Example  $2(235 \times .75 / 25.4) + 15 = 28.87$  inches tire diameter

Gear Ration:  $\text{New tire size} \times \text{old ratio} / \text{old tire size} = \text{New ratio}$   
Example:  $32 \times 3.31 / 28.87 = 3.67$

Speed limit for each symbol.

| Speed Symbol | Speed    |
|--------------|----------|
| L            | 75 mph   |
| M            | 81 mph   |
| N            | 87 mph   |
| P            | 93 mph   |
| Q            | 99 mph   |
| R            | 106 mph  |
| S            | 112 mph  |
| T            | 118 mph  |
| U            | 124 mph  |
| H            | 130 mph  |
| V            | 149 mph  |
| W            | 169 mph  |
| Y            | 186 mph  |
| (Y)          | 186 mph+ |

Based on the load index rating chart, **94** corresponds to a tire load rating of **1,477 lbs.** at maximum air pressure. So, the maximum load-carrying capacity of all four tires would be **4 x 1,477 lbs. = 5,908 lbs.**

| Load Index | Pounds    | Kilograms | Load Index | Pounds    | Kilograms | Load Index | Pounds    | Kilograms |
|------------|-----------|-----------|------------|-----------|-----------|------------|-----------|-----------|
| 70         | 739 lbs   | 335 kg    | 89         | 1,279 lbs | 580 kg    | 108        | 2,205 lbs | 1,000 kg  |
| 71         | 761 lbs   | 345 kg    | 90         | 1,323 lbs | 600 kg    | 109        | 2,271 lbs | 1,030 kg  |
| 72         | 783 lbs   | 355 kg    | 91         | 1,356 lbs | 615 kg    | 110        | 2,337 lbs | 1,060 kg  |
| 73         | 805 lbs   | 365 kg    | 92         | 1,389 lbs | 630 kg    | 111        | 2,403 lbs | 1,090 kg  |
| 74         | 827 lbs   | 375 kg    | 93         | 1,433 lbs | 650 kg    | 112        | 2,469 lbs | 1,120 kg  |
| 75         | 853 lbs   | 387 kg    | 94         | 1,477 lbs | 670 kg    | 113        | 2,535 lbs | 1,150 kg  |
| 76         | 882 lbs   | 400 kg    | 95         | 1,521 lbs | 690 kg    | 114        | 2,601 lbs | 1,180 kg  |
| 77         | 908 lbs   | 412 kg    | 96         | 1,565 lbs | 710 kg    | 115        | 2,679 lbs | 1,215 kg  |
| 78         | 937 lbs   | 425 kg    | 97         | 1,609 lbs | 730 kg    | 116        | 2,756 lbs | 1,250 kg  |
| 79         | 963 lbs   | 437 kg    | 98         | 1,653 lbs | 750 kg    | 117        | 2,833 lbs | 1,285 kg  |
| 80         | 992 lbs   | 450 kg    | 99         | 1,709 lbs | 775 kg    | 118        | 2,910 lbs | 1,320 kg  |
| 81         | 1,019 lbs | 462 kg    | 100        | 1,764 lbs | 800 kg    | 119        | 2,998 lbs | 1,360 kg  |
| 82         | 1,047 lbs | 475 kg    | 101        | 1,819 lbs | 825 kg    | 120        | 3,086 lbs | 1,400 kg  |
| 83         | 1,074 lbs | 487 kg    | 102        | 1,874 lbs | 850 kg    | 121        | 3,197 lbs | 1,450 kg  |
| 84         | 1,102 lbs | 500 kg    | 103        | 1,929 lbs | 875 kg    | 122        | 3,307 lbs | 1,500 kg  |
| 85         | 1,135 lbs | 515 kg    | 104        | 1,984 lbs | 900 kg    | 123        | 3,417 lbs | 1,550 kg  |
| 86         | 1,168 lbs | 530 kg    | 105        | 2,039 lbs | 925 kg    | 124        | 3,527 lbs | 1,600 kg  |
| 87         | 1,201 lbs | 545 kg    | 106        | 2,094 lbs | 950 kg    | 125        | 3,638 lbs | 1,650 kg  |
| 88         | 1,235 lbs | 560 kg    | 107        | 2,149 lbs | 975 kg    | 126        | 3,748 lbs | 1,700 kg  |