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

<table>
<thead>
<tr>
<th>Light</th>
<th>Section Width (mm)</th>
<th>Radial Construction</th>
<th>Tire Size</th>
<th>Diameter</th>
<th>Load Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>LT 285/70 R 17</td>
<td>225/70 R 19.5</td>
<td>P</td>
<td>215/70 R 14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Prefixes

- A tire without a specific application prefix can be called “a Euro Metric” tire.
- LT - Light truck applications
- P - Passenger cars and SUV’s 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

<table>
<thead>
<tr>
<th>Section Width (mm)</th>
<th>Radial Construction</th>
<th>Tire Size</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>225/70 R 19.5</td>
<td>128 L</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Light Truck Numeric

<table>
<thead>
<tr>
<th>Tire Diameter (in)</th>
<th>Construction</th>
<th>Light Truck</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 X 10.5 R 15 LT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMMERCIAL TRUCK - STANDARD

<table>
<thead>
<tr>
<th>Section Width (in)</th>
<th>Radial Construction</th>
<th>Tire Size</th>
<th>Diameter</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 R 22.5</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

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 is a single tire and dual tire application.

Example 150/147 = SINGLE TIRE / DUAL TIRES

<table>
<thead>
<tr>
<th>Load Kg</th>
<th>Load Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>150/147</td>
<td>147</td>
</tr>
</tbody>
</table>

LOAD INDEX

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
C - Up to 37 mph
D - Up to 40 mph
E - Up to 43 mph
F - Up to 50 mph
G - Up to 56 mph
J - Up to 61 mph
K - Up to 68 mph
L - Up to 75 mph
M - Up to 81 mph
N - Up to 87 mph
O - Up to 94 mph
Q - Up to 100 mph
R - Up to 106 mph
S - Up to 112 mph
T - Up to 118 mph
U - Up to 124 mph
V - Up to 130 mph
W - Up to 136 mph
Y - Up to 136 mph
Z - 149 mph +

TIRE DAMAGE - REQUIRES REPLACEMENT

Sun and age cracking (sun-cut)
Soap and cut in sidewall with cords exposed
Missing tread blocks (chucking) with cords exposed
Blister inside the tire from driving on it while it was under inflated

TIRE INFORMATION

TIRE ROTATION DIAGRAMS

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

TIRE ANATOMY

Main Tread Groove
Tread Reparable Area
Tread Blocks
Shoulder Not Reparable
Sidewall
Cap Plies
Inner Liner
Steel Belts
Beads
Body Plies

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.

Bureau of Land Management (BLM) National Fire Equipment Program (NFEP) email: nfep@blm.gov

Additional information can be found at https://www.safercar.gov