

Passenger tires in the United States are available in two size designations: 'P-Metric' and 'European Metric'. The difference is easily identifiable in that P-Metric sizes begin with the letter 'P' whereas European Metric sizes have no alpha designation. This bulletin gives guidance on replacing P-Metric OE fitments with European Metric tires of the same nominal size (section width, aspect ratio and rim diameter).

P-Metric tire load carrying capacities at various cold inflation pressures are defined by the Tire and Rim Association (TRA). European Metric tire load carrying capacities at various cold inflation pressures are defined by the European Tyre and Rim Organization (ETRTO). Because there may be some difference between these two standards, Yokohama designs and manufactures its tires to meet or exceed all applicable regulatory requirements incorporating both the TRA and ETRTO standards. Yokohama passenger car tires are provided with either 'P-Metric' or 'European Metric' size designations.

When considering tire replacement, Yokohama recommends using the following guidelines:

1. Refer to the vehicle placard and/or owner's manual to determine the correct tire size designation and cold tire inflation pressure. The original equipment tire size may be either P-Metric or European Metric.
2. Always ensure that replacement tires at the installed pressure provide equal or greater load capacity than the original equipment tires at placard pressure.
3. Always follow Rubber Manufacturers Association (RMA) guidelines for tire service and replacement. RMA publications are available on their website at <http://www.rma.org/publications>.

Due to recent global harmonization efforts, some TRA and ETRTO sizes have harmonized load equations. In these cases, the maximum load for the P-Metric and European Metric tire will be the same, and the replacement tire should be inflated to the placard pressure. If there is any doubt about whether a tire size is a harmonized size, please contact Yokohama Consumer Affairs at the number listed below.

In the case of non-harmonized sizes, it is generally true that European Metric tires have higher maximum loads but carry lower loads at common vehicle placard pressures and may require additional pressure when replacing p-metric tires. The installing dealer is responsible for inflating replacement tires to a level that carries the placard load and for educating the end-user about the increased pressure requirement.

Examples:

P-Metric tire size installed as original equipment is now being replaced with a European Metric tire size:

Method 1: Inflate to minimum pressure necessary to carry placard load

2008 Toyota Camry LE

	Original Equipment	Replacement
Size	P215/60R16 94V	215/60R16 95V
Maximum Tire Load Capacity	1477 lb	1521 lb
Recommended Tire Inflation	32 PSI (Carries 1412 lb)	34 PSI (Carries 1453 lb)

Method 2: Inflate to minimum pressure corresponding to maximum load as stamped on tire sidewall. This may not be the pressure level that is stamped on the tire sidewall.

Euro-metric standard load: 36 PSI

Euro-metric reinforced (extra load): 42 PSI

Exception: Do not exceed the maximum pressure stamped on the tire sidewall.

Both methods accomplish the important goal of carrying the load of the OE tire at placard pressure.

If you need our assistance, please contact the Yokohama Tire Corporation Consumer Affairs Department at 1-800-722-9888 #2.