

# TIRE INSPECTION FORM

**This form must be completed and returned with your entry packet.**

(Check those that apply)

Pony Express 130 \_\_\_\_\_ Bonneville 100 \_\_\_\_\_ Gambler's Run Twin 50 \_\_\_\_\_

NAME \_\_\_\_\_ CAR # (if known) \_\_\_\_\_

YEAR, MAKE, MODEL of CAR \_\_\_\_\_

TARGET SPEED \_\_\_\_\_ TECH SPEED \_\_\_\_\_

MAKE OF TIRE (Michelin, Yokohama, etc.) \_\_\_\_\_

MODEL OF TIRE (AVS, MXX3, Eagle GT, etc.) \_\_\_\_\_

TIRE SIZE: FRONT \_\_\_\_\_ REAR \_\_\_\_\_

LOAD RATING (pounds) FRONT \_\_\_\_\_ REAR \_\_\_\_\_

MAXIMUM INFLATION PRESSURE FRONT \_\_\_\_\_ REAR \_\_\_\_\_

TREAD DEPTH (full,  $\frac{3}{4}$ ,  $\frac{1}{2}$ , or  $\frac{1}{4}$ ) FRONT \_\_\_\_\_ REAR \_\_\_\_\_

CURRENT MILEAGE FRONT \_\_\_\_\_ REAR \_\_\_\_\_

DATE OF PURCHASE FRONT \_\_\_\_\_ REAR \_\_\_\_\_

DATE CODES LF \_\_\_\_\_ RF \_\_\_\_\_ LR \_\_\_\_\_ RR \_\_\_\_\_

We strongly recommend not using tires greater than 4 years old. Tires should be in excellent condition with no repairs or uneven wear. Inspect your tires closely for cuts, punctures, or sidewall cracks before bringing them to the event. . A low tire pressure warning system is highly recommended.

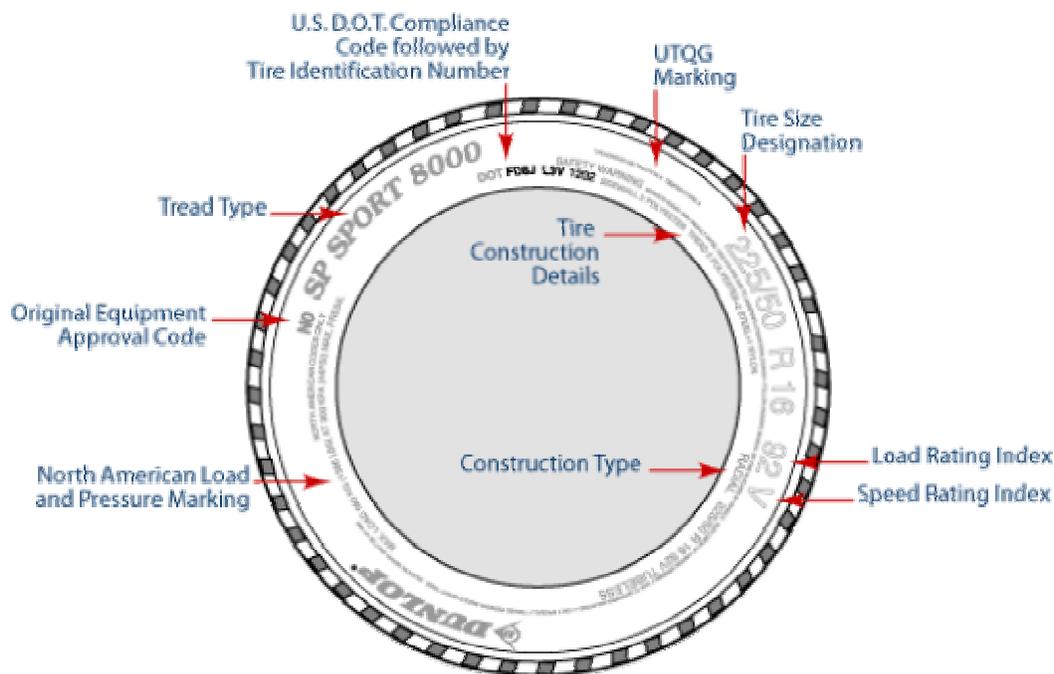
**Load Carrying Capacity: All tires must have an equal or greater load carrying capacity than the car's original OEM-spec tire. (i.e., the base tire for a 1999 Mustang is a P205/65R15 rated @ 1400 lbs. Any replacement tire must have a load rating of at least 1400 lbs., regardless of the speed rating or Division/Class in which the vehicle is competing).**

Racing Tires: Because racing tires do not have load or speed ratings, those who wish to use such tires must submit the type of vehicle, the vehicle's top speed, and the intended tire sizes to MKM for **pre-approval**.

## SUPPLEMENTAL INFORMATION ON TIRE MARKINGS & SPEED RATINGS

### Sidewall Markings

There is a lot of information on the sidewall of a tire. Typically, you'll find [UTQG ratings](#) for treadwear, traction and temperature, the [size](#) of the tire, the load rating index number with a [speed rating](#) index, the construction type (bias or radial), the D.O.T. (Dept. of Transportation) compliance code, construction details, and of course, the make and model of the tire. On some tires used as original equipment, you may also find a marking that indicates its OE status. Porsche uses an N-0 or N-1 designation, BMW uses a star on some O.E. tires and General Motors uses a "TPC" code. Light Truck tires are sometimes marked with an LT for "Light Truck" before the size, passenger tires are often marked with the letter P for "Passenger" before the size. Passenger tires of the same size with or without the P are virtually interchangeable. **The tire DATE CODE is a 3 or 4 digit number, usually inside an oval, and is usually found on the inside sidewall.** The letters denote the week and year of manufacture. For example, "1202" means the 12<sup>th</sup> week of 2002.



### Speed Ratings

In Europe, where selected highways do not have speed limits and high speed driving is permitted, speed ratings were established to match the speed capability of tires with the top speed capability of the vehicles to which they are applied. Speed ratings are established in kilometers per hour and subsequently converted to miles per hour (which explains why speed ratings appear established at "unusual" mile per hour increments). Despite the tire manufacturer's ability to manufacture tires capable of high speeds, none of them recommend the use of their products in excess of legal speed limits.

Speed ratings are based on laboratory tests where the tire is pressed against a large diameter metal drum to reflect its appropriate load, and run at ever increasing speeds (in 6.2 mph steps in 10 minute increments) until the tire's required speed has been met.

It is important to note that speed ratings only apply to tires that have not been damaged, altered, under-inflated or overloaded. Additionally, most tire manufacturers maintain that a tire that has been cut or punctured no longer retains

the tire manufacturer's original speed rating, even after being repaired because the tire manufacturer can't control the quality of the repair.

Over the years, tire speed rating symbols have been marked on tires in any of three ways shown in the following examples:

225/50SR16                      225/50SR16 89S                      or 225/50R16 89S

Each of these was an acceptable method of identifying speed ratings.

Early tires had their speed rating symbol shown "within" the tire size, such as 225/50SR16. Tires using this type of branding were not to have been produced after 1991.

225/50SR16	112 mph, 180 km/h
225/50HR16	130, 210 km/h
225/50VR16	in excess of 130 mph, 210 km/h

Beginning in 1991, the speed symbol denoting a fixed maximum speed capability of new tires must be shown only in the speed rating portion of the tire's service description, such as 225/50R16 89S. The most common tire speed rating symbols, maximum speeds and typical applications are shown below:

N	87 mph	140 km/h	Temporary Spare Tires
P	93 mph	150 km/h	
Q	99 mph	160 km/h	Studless & Studdable Winter Tires
R	106 mph	170 km/h	H.D. Light Truck Tires
S	112 mph	180 km/h	Family Sedans & Vans
T	118 mph	190 km/h	Family Sedans & Vans
U	124 mph	200 km/h	
H	130 mph	210 km/h	Sport Sedans & Coupes
V	149 mph	240 km/h	Sport Sedans, Coupes & Sports Cars

When Z-speed rated tires were first introduced, they were thought to reflect the highest tire speed rating that would ever be required, in excess of 240 km/h or 149 mph. While Z-speed rated tires are capable of speeds in excess of 149 mph, how far above 149 mph was not identified. That ultimately caused the automotive industry to add W- and Y-speed ratings to identify the tires that meet the needs of new vehicles that have extremely high top-speed capabilities.

W	168 mph	270 km/h	Exotic Sports Cars
Y	186 mph	300 km/h	Exotic Sports Cars

While a Z-speed rating still often appears in the tire size designation of these tires, such as 225/50ZR16 91W, the Z in the size signifies a maximum speed capability in excess of 149 mph, 240 km/h; the W in the service description indicates the tire's 168 mph, 270 km/h maximum speed.

225/50ZR16	in excess of 149 mph, 240 km/h
205/45ZR17 88W	168 mph, 270 km/h
285/35ZR19 99Y	186 mph, 300 km/h

Most recently, when the Y-speed rating indicated in a service description is enclosed in parenthesis, such as 285/35ZR19 (99Y), the top speed of the tire has been tested in excess of 186 mph, 300 km/h indicated by the service description as shown below:

285/35ZR19 99Y	186 mph, 300 km/h
285/35ZR19 (99Y)	in excess of 186 mph, 300 km/h

As vehicles have increased their top speeds into Autobahn-only ranges, the tire speed ratings have evolved to better identify the tires capability, allowing drivers to match the speed of their tires with the top speed of their vehicle.