MD Alignment

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Tech Bulletin #13

July 18, 2016

Tire Pressure Labeling Requirements

In response to the continued discussion about Maximum Loads and Tire Pressures listed on the sidewall of the Tires, I have copied the synopsis of comments on the Federal rules and the CFR 571.119 so each of you can read the appropriate material. Please note that the discussion is about the difference in labeling requirements for Passenger and Light Truck (PLT) tires and Commercial Truck Tires. CFR 571.119 applies to Commercial tires.

You will note that the discussion is about the differences in Labeling Requirements for PLT tires and Commercial Truck Tires. CFR 571.119 applies to Commercial Truck Tires for vehicles over 10,000 GVW.

Commenters on the ANPRM and NPRM and survey data conveyed that misunderstanding concerning the meaning of maximum permissible inflation pressure exists among consumers.�Nevertheless, most commenters supported retaining this requirement.�The commenters and focus group participants also expressed that the maximum inflation pressure provides a failsafe guideline for tire inflation.�The agency concurs that the greatest likelihood of tire failure results from underinflation, therefore, the agency is not deleting or revising the requirement for the maximum permissible inflation pressure marking on the tire, except to extend this requirement to tires for use on all light vehicles with a GVWR of 10,000 pounds or less, except LSVs and motorcycles. [7]�
Several commenters to the docket suggested adding information to the tire to distinguish the maximum permissible inflation pressure from the recommended inflation pressure.�The agency believes that adding additional language to the sidewall to clarify the distinction between maximum inflation pressure and recommended inflation pressure is not feasible.�Sidewalls are becoming progressively smaller with the advent of low profile tires and requiring additional information in this already crowded space will cause clutter and greater consumer confusion.�The agency anticipates that improvements in the tire placard, standardization of the placard location, and an expanded consumer information program will reduce the number of consumers who mistake the maximum inflation pressure for the recommended inflation pressure.
RMA commented that NHTSA�s proposal would require establishment of new maximum permissible inflation pressures for LT tires that are higher than the current marked pressures because LT tires are now marked with a maximum load rating and corresponding inflation pressure per 571.119. (See 571.119 in the second section of this document) �NHTSA has considered these comments.�While the agency agrees that the requirement might necessitate manufacturers determining and labeling a new maximum permissible inflation pressure on LT tires, NHTSA has concluded that the establishment of maximum permissible inflation pressures for LT tires should not be more complicated than the process by which manufacturers currently label LT tires with inflation pressures that correspond with the maximum load of the tire.

Currently, LT tires are labeled with an inflation pressure that corresponds to the maximum load to be carried by the tire.�These values are included in industry yearbooks, such as the "Tire and Rim Association" ("T&RA") Year Book, but are considered minimum cold pressures for the maximum loads listed.� The yearbooks provide guidelines for using higher inflation pressures, which are based on speed and loading conditions.�Under certain conditions, the inflation pressure could be increased by as much as 10 psi� (69 kPa), although the maximum load that can be carried by the tire under normal operating conditions would not increase.�
Although the agency acknowledges that the inflation pressures corresponding to the maximum loads in publications such as the TRA Yearbook are not absolute maximum inflation pressure values, we believe that it is appropriate to label these pressures on the tire as the maximum permissible inflation pressure for the maximum load specified.�This information would then correspond with the information labeled on passenger car tires and would ensure that the consumer is provided with an upper threshold failsafe value that would ensure safe operation of the vehicle in a maximum loading condition or in the absence of the consumer�s using recommended inflation pressure information from the vehicle placard or owner�s manual.�The agency will allow manufacturers, at their discretion, to label maximum permissible inflation pressures above those listed, up to 10 psi higher, on their LT tires to accommodate design prerogatives and anticipated operational usages.��

The final rule establishes a single standard for light vehicle tires, FMVSS No. 139, New PneumaticRadial Tires for Light Vehicles.�The final rule contains labeling requirements that address the following aspects of tire and vehicle labeling: tire markings, the Tire Identification Number (TIN), vehicle placard content and format, placard location, and owner�s manual information.�NHTSA will also be establishing upgraded safety performance requirements for tires in a forthcoming final rule, which would also be included in the new standard.

§ 571.119 Standard No. 119;
New pneumatic tires for motor vehicles with a GVWR of more than 4,536 kilograms (10,000 pounds) and motorcycles.

S1. Scope. This standard establishes performance and marking requirements for tires for use on motor vehicles with a GVWR of more than 10,000 pounds and motorcycles.

S2. Purpose. The purpose of this standard is to provide safe operational performance levels for tires used on motor vehicles with a GVWR of more than 10,000 pounds, trailers, and motorcycles, and to place sufficient information on the tires to permit their proper selection and use.

S3. Application. This standard applies to:

(a) New pneumatic tires for use on motor vehicles with a GVWR of more than 4,536 kilograms (10,000 pounds) manufactured after 1948;

(b) New pneumatic light truck tires with a tread depth of 18/32 inch or greater, for use on motor vehicles with a GVWR of 4,536 kilograms (10,000 pounds) or less manufactured after 1948;

(c) Tires for use on special-use trailers (ST, FI and 8-12 rim or lower diameter code); and

(d) Tires for use on motorcycles manufactured after 1948.

S4. Definitions. All terms defined in the Act and the rules and standards issued under its authority are used as defined therein.

Light truck tire means a tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

Model rim assembly means a test device that (a) includes a rim which conforms to the published dimensions of a commercially available rim, (b) includes an air valve assembly when used for testing tubeless tires or an innertube and flap (as required) when used for testing tubetype tires, and (c) undergoes no permanent rim deformation and allows no loss of air through the portion that it comprises of the tire-rim pressure chamber when a tire is properly mounted on the assembly and subjected to the requirements of this standard.

S5. Tire and rim matching information.

S5.1 Each manufacturer of tires shall ensure that a listing of the rims that may be used with each tire that he produces is provided to the public. For purposes of this section each rim listing shall include dimensional specifications and a diagram of the rim. However a listing compiled in accordance with paragraph (a) of this section need not include dimensional specifications or a diagram of a rim if the rim's dimensional specifications and diagram are contained in each listing published in accordance with paragraph (b) of this standard. The listing shall be in one of the following forms:

(a) Listed by manufacturer name or brand name in a document furnished to dealers of the manufacturer's tires, to any person upon request, and in duplicate to: Docket Section, National Highway Traffic Safety Administration, 400 Seventh Street SW., Washington, DC 20590; or

(b) Contained in publications, current at the date of manufacture of the tire or any later date, of at least one of the following organizations:
The Tire and Rim Association
The European Tyre and Rim Technical Organisation
Japan Automobile Tire Manufacturers' Association, Inc.
Deutsche Industrie Norm
British Standards Institution
Scandinavian Tire and Rim Organization
The Tyre and Rim Association of Australia

S5.2 Information contained in a publication specified in S5.1(b) which lists general categories of tires and rims by size designation, type of construction, and/or intended use, shall be considered to be manufacturer's information pursuant to S5.1 for the listed tires, unless the publication itself or specific information provided according to S5.1(a) indicates otherwise.

S6. Requirements. Each tire shall be capable of meeting any of the applicable requirements set forth below, when mounted on a model rim assembly corresponding to any rim designated by the tire manufacturer for use with the tire in accordance with S5. However, a particular tire need not meet further requirements after having been subjected to and met the endurance test (S6.1), strength test (S6.2), or high speed performance test (S6.3).

S6.1 Endurance.

S6.1.1 Prior to testing in accordance with the procedures of S7.2, a tire shall exhibit no visual evidence of tread, sidewall, ply, cord, innerliner, or bead separation, chunking, broken cords, cracking, or open splices.

S6.1.2 When tested in accordance with the procedures of S7.2:

(a) There shall be no visual evidence of tread, sidewall, ply, cord, innerliner, or bead separation, chunking, broken cords, cracking, or open splices.

(b) The tire pressure at the end of the test shall be not less than the initial pressure specified in S7.2(a).

S6.2 Strength. When tested in accordance with the procedures of S7.3 a tire's average breaking energy value shall be not less than the value specified in Table II for that tire's size and load range.

S6.3 High speed performance. When tested in accordance with the procedures of S7.3, a tire shall meet the requirements set forth in S6.1.1 and S6.1.2(a) and (b). However, this requirement applies only to motorcycle tires and to non-speed-restricted tires of nominal rim diameter code 14.5 or less marked load range A, B, C, or D.

S6.4 Treadwear indicators. Except as specified in this paragraph, each tire shall have at least six treadwear indicators spaced approximately equally around the circumference of the tire that enable a person inspecting the tire to determine visually whether the tire has worn to a tread depth of 1.6 mm (one-sixteenth of an inch). Tires with a rim diameter code of 12 or smaller shall have at least three such treadwear indicators. Motorcycle tires shall have at least three such indicators which permit visual determination that the tire has worn to a tread depth of 0.8 mm (one-thirty-second of an inch).

S6.5 Tire markings. Except as specified in this paragraph, each tire shall be marked on each sidewall with the information specified in paragraphs (a) through (j) of this section. The markings shall be placed between the maximum section width (exclusive of sidewall decorations or curb ribs) and the bead on at least one sidewall, unless the maximum section width of the tire is located in an area which is not more than one-fourth of the distance from the bead to the shoulder of the tire. If the maximum section width falls within that area, the markings shall appear between the bead and a point one-half the distance from the bead to the shoulder of the tire, on at least one sidewall. The markings shall be in letters and numerals not less than 2 mm (0.078 inch) high and raised above or sunk below the tire surface not less that 0.4 mm (0.015 inch), except that the marking depth shall be not less than 0.25mm (0.010 inch) in the case of motorcycle tires. The tire identification and the DOT symbol labeling shall comply with part 574 of this chapter. Markings may appear on only one sidewall and the entire sidewall area may be used in the case of motorcycle tires and recreational, boat, baggage, and special trailer tires.

(a) The symbol DOT, which shall constitute a certification that the tire conforms to applicable Federal motor vehicle safety standards. This symbol may be marked on only one sidewall.

(b) The tire identification number required by part 574 of this chapter. This number may be marked on only one sidewall.

(c) The tire size designation as listed in the documents and publications designated in S5.1.

(d) The maximum load rating and corresponding inflation pressure of the tire, shown as follows:

(Mark on tires rated for single and dual load): Max load single __kg (__lb) at __kPa (__psi) cold. Max load dual __kg (__lb) at __kPa (__psi) cold.

(Mark on tires rated only for single load): Max load __kg (__lb) at __kPa (__psi) cold.

(e) The speed restriction of the tire, if 90 km/h (55 mph) or less, shown as follows:

Max speed __km/h (__mph).

(f) The actual number of plies and the composition of the ply cord material in the sidewall and, if different, in the tread area;

(g) The words “tubeless” or “tube type” as applicable.

(h) The word “regroovable” if the tire is designed for regrooving.

(i) The word “radial” if a radial tire.

(j) The letter designating the tire load range.

S6.6 Maximum load rating. If the maximum load rating for a particular tire size is shown in one or more of the publications described in S5.1(b), each tire of that size designation shall have a maximum load rating that is not less than the published maximum load rating, or if there are differing published ratings for the same tire size designation, not less than the lowest published maximum load rating for the size designation.