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Submitted via Regulations.gov to Docket # NHTSA-2019-0011
Jesus Valentin-Ruiz, Office of Crash Avoidance Standards
David Jasinski, Office of the Chief Counsel
National Highway Traffic Safety Administration (NHTSA)
U.S. Department of Transportation
1200 New Jersey Avenue SE
Washington, DC 20590

Subject: Tire and Rim Association comments on ANPRM to amend FMVSS No. 139 and No.109

Ref:

- Tire and Rim Association Petition for Rulemaking to adopt 415 kPa inflation for T-Type Spare Tires; July 14, 2014.
- Tire and Rim Association Petition for Rulemaking to adopt 250 kPa and 290 kPa inflation for Standard Load and Extra load tires respectively; December 3, 2010 and resubmitted September 16, 2013.

The Tire and Rim Association, Inc. (TRA) submits the following comments on the subject ANPRM. TRA was founded in 1903 and since that time has been the standardizing body in the United States for the interchangeability of tires, rims and valves. Our standards include the establishment of tire size designations and identification guidelines. Our members include all of the domestic and foreign major tire, rim and valve manufacturing companies. Further, we are the administrator of the United States Technical Advisory Group to ISO Technical Committee 31, which is responsible for the standardization of classification, size designations, dimensions and ratings of tires, rims and valves.

We endorse the effort to upgrade FMVSS 139 (Passenger Car Tires) and FMVSS 109 (T-Type Spare Tires) to the state-of-the-art requirements and, in that context, wish to comment on the global state-of-the-art tire marking and identification practice.

Our petitions clearly state the suggested additions to Maximum Permissible Inflation Pressures for Standard Load and Extra Load Passenger Car Tires and T-Type Spare Tires. The purpose of these comments is to illustrate how these requested additions have already been introduced into the Tire and Rim Publications, which are referenced by NHTSA in §571.109 S4.4.1 (b) and §571.139 S4.1.1 (b).

- Attached page 1-42 is typical of the 2020 TRA Year Book pages 1-12 to 1-44 (even pages).
- Attached page 1-44 includes a table that references the currently regulated Maximum Permissible Inflation Pressure with the corresponding inflation pressure of maximum load.
- Attached page 1-54 is typical of pages 1-47 to 1-54 for T-Type Spare Tires. Page 1-54 contains the footnote designated by '#', which explains the 415/420 kPa inflation pressures. Both of these inflation pressures as well as the footnote have been published in our Year Books since 2014.

Please feel free to contact me with any further questions that the Agency may have regarding these comments. We appreciate the Agency's consideration to update §571.109 and §571.139 to be consistent with current TRA and ISO standards.

Sincerely,

A handwritten signature in black ink, appearing to read "Rudy Consolacion". The signature is fluid and cursive, with the first name "Rudy" being more prominent and the last name "Consolacion" following in a similar style.

Rudy Consolacion
Executive Vice President
The Tire and Rim Association, Inc.

Attachments

“P” TYPE RADIAL TIRES USED ON PASSENGER VEHICLES

TABLE P-1 TIRE AND RIM ASSOCIATION STANDARD

See pages 1-03 thru 1-07 for TIRE SELECTION PROCEDURE.

TIRE SIZE DESIGNATION	LOAD INDEX			TIRE LOAD LIMITS AT VARIOUS COLD INFLATION PRESSURES								
				kPa	180	200	220	240	250	260	280	290
	LL	SL(ISO)	XL(ISO)	psi	26	29	32	35	36	38	41	42
35 SERIES (CONTINUED)												
P225/35R20	---	---	90	kg lbs.	410 904	445 981	480 1058	515 1135	530 1168	550 1213	585 1290	600 1323
P255/35R20	---	93	---	kg lbs.	539 1188	577 1272	614 1354	650 1433				
	---	---	97	kg lbs.	539 1188	577 1272	614 1354	650 1433	678 1495	696 1534	730 1609	
P275/35R20	89	---	---	kg lbs.	510 1124	540 1190	565 1246	580 1279				
	---	---	101	kg lbs.	560 1235	610 1345	660 1455	705 1554	730 1609	755 1664	800 1764	825 1819
(P)285/35R20	92	---	---	kg lbs.	510 1124	545 1201	580 1279	615 1356	630 1389			
(P)295/35R20	94	---	---	kg lbs.	540 1190	580 1279	615 1356	650 1433	670 1477			
(P)305/35R20	---	104	---	kg lbs.	725 1598	780 1720	830 1830	875 1929	900 1984			
(P)315/35R20	97	---	---	kg lbs.	590 1301	630 1389	670 1477	710 1565	730 1609			
(P)265/35R22	---	---	102	kg lbs.	575 1268	625 1378	675 1488	725 1598	750 1653	780 1720	825 1819	850 1874
P305/35R24	---	---	112	kg lbs.	810 1786	865 1907	920 2028	975 2149	1000 2205	1045 2304	1095 2414	1120 2469
(P)385/35R24	---	116	---	kg lbs.	1010 2227	1080 2381	1150 2535	1215 2679	1250 2756			
30 SERIES												
(P)285/30R18	86	---	---	kg lbs.	430 948	460 1014	490 1080	515 1135	530 1168			
(P)295/30R18	88	---	---	kg lbs.	450 992	485 1069	515 1135	545 1201	560 1235			
	---	94	---	kg lbs.	515 1135	560 1235	605 1334	650 1433	670 1477			
P315/30R18	91	---	---	kg lbs.	535 1179	565 1246	595 1312	615 1356				
P335/30R18	95	---	---	kg lbs.	595 1312	625 1378	655 1444	690 1521				
P345/30R18	97	---	---	kg lbs.	625 1378	660 1455	690 1521	730 1609				
(P)275/30R19	---	---	96	kg lbs.	485 1069	525 1157	570 1257	610 1345	630 1389	650 1433	690 1521	710 1565
(P)285/30R19	87	---	---	kg lbs.	440 970	470 1036	500 1102	530 1168	545 1201			
	---	94	---	kg lbs.	515 1135	560 1235	605 1334	650 1433	670 1477			
P325/30R19	94	---	---	kg lbs.	590 1301	620 1367	650 1433	670 1477				
P345/30R19	98	---	---	kg lbs.	650 1433	685 1510	720 1587	750 1653				
(P)355/30R19	99	---	---	kg lbs.	625 1378	670 1477	715 1576	755 1664	775 1709			
(P)275/30R20	---	---	97	kg lbs.	500 1102	545 1201	585 1290	630 1389	650 1433	670 1477	710 1565	730 1609
(P)285/30R20	---	95	---	kg lbs.	530 1168	575 1268	625 1378	670 1477	690 1521			
	---	---	99	kg lbs.	530 1168	575 1268	625 1378	670 1477	690 1521	710 1565	755 1664	775 1709
(P)315/30R20	---	101	---	kg lbs.	665 1466	715 1576	760 1675	805 1775	825 1819			

See notes on page 1-44.

(continued)

Note: Tires with the “P” prefix in parenthesis are globally harmonized and the “P” is optional in the size designation.

“P” TYPE RADIAL TIRES USED ON PASSENGER VEHICLES**TABLE P-1 TIRE AND RIM ASSOCIATION STANDARD**

See pages 1-03 thru 1-07 for TIRE SELECTION PROCEDURE.

TIRE SIZE DESIGNATION	LOAD INDEX			TIRE LOAD LIMITS AT VARIOUS COLD INFLATION PRESSURES								
				kPa	180	200	220	240	250	260	280	290
	LL	SL(ISO)	XL(ISO)	psi	26	29	32	35	36	38	41	42
30 SERIES (CONTINUED)												
P255/30R24	---	---	97	kg	500	545	585	630	650	670	710	730
				lbs.	1102	1201	1290	1389	1433	1477	1565	1609
(P)285/30R24	---	---	103	kg	595	650	700	750	775	800	850	875
				lbs.	1312	1433	1543	1653	1709	1764	1874	1929
25 SERIES												
P295/25R19	---	90	---	kg	460	500	540	580	600			
				lbs.	1014	1102	1190	1279	1323			
(P)335/25R20	94	---	---	kg	540	580	615	650	670			
				lbs.	1190	1279	1356	1433	1477			
(P)335/25R20	---	99	---	kg	595	650	700	750	775			
				lbs.	1312	1433	1543	1653	1709			
P265/25R23	---	---	92	kg	430	470	505	540	560	575	615	630
				lbs.	948	1036	1113	1190	1235	1268	1356	1389
P275/25R24	---	92	---	kg	485	525	570	610	630			
				lbs.	1069	1157	1257	1345	1389			
P275/25R24	---	---	96	kg	485	525	570	610	630	650	690	710
				lbs.	1069	1157	1257	1345	1389	1433	1521	1565
(P)405/25R24	---	---	116	kg	955	1020	1085	1150	1180	1230	1250	1250
				lbs.	2105	2249	2392	2535	2601	2712	2756	2756
P275/25R26	---	---	98	kg	515	560	605	650	670	685	730	750
				lbs.	1135	1235	1334	1433	1477	1510	1609	1653

Note: Tires with the “P” prefix in parenthesis are globally harmonized and the “P” is optional in the size designation.

The “lbs.” figures tabulated above are converted from the calculated “kg” values then rounded to the nearest pound.

NOTES 1: Minimum cold inflation pressures shall be as indicated in the table for corresponding tire loads.

- 2: If the vehicle is equipped with a Tire Pressure Monitoring System (TPMS), the load on the tire must not exceed the tire load capacity based on the inflation pressure at the point of illumination of the TPMS telltale.
- 3: Cold inflation pressures may be increased above those applicable to the tire loads up to the maximum marked on the tire with no increase in load.
- 4: For tires used in the United States, the “Maximum Permissible Inflation Pressure” which must be marked on the tire as prescribed by Federal Motor Vehicle Safety Standards No. 109 and 139 shall be one of the following:

LOAD IDENTIFICATION	MAX. PERMISSIBLE INFLATION PRESSURE MARKING	*CORRESPONDING MAXIMUM LOAD
STANDARD LOAD, LL, SL(ISO)	240 kPa (35 psi)	240 kPa (35 psi) Load
	300 kPa (44 psi)	240 kPa (35 psi), **250 kPa (36 psi) Load
	350 kPa (51 psi)	240 kPa (35 psi), **250 kPa (36 psi) Load
EXTRA LOAD (XL), XL(ISO)	280 kPa (41 psi)	280 kPa (41 psi) Load
	340 kPa (50 psi)	280 kPa (41 psi), **290 kPa (42 psi) Load

* Maximum loads for tire marking are shown in the tables in bold face print.

** Tire sizes with 250 kPa (36 psi) and 290 kPa (42 psi) reference pressures have globally harmonized load calculations.

FOR RIM AND WHEEL LOAD INFORMATION, SEE NOTE 9, PAGE 1-45.

**“T” TYPE DIAGONAL (BIAS) SPARE TIRES FOR
TEMPORARY USE ON PASSENGER VEHICLES
TIRE AND RIM ASSOCIATION STANDARD**

Table PCT-1B (continued)

Millimeters/*Inches*

TIRE SIZE DESIG- NATION	TIRE LOAD LIMITS						MEASUR- ING RIM WIDTH	DESIGN NEW TIRE		*MAX. GROWN TIRE		** MINIMUM SIZE FACTOR	APPROVED RIM CONTOURS
	LIGHT LOAD			STANDARD LOAD				SECTION WIDTH	OVERALL DIAMETER	OVERALL WIDTH	OVERALL DIAMETER		
	60 <i>psi</i>	#415/420 kPa	LOAD INDEX NO.	60 <i>psi</i>	#415/420 kPa	LOAD INDEX NO.							
(<i>lbs.</i>)	(kg)		(<i>lbs.</i>)	(kg)									
70 SERIES (CONTINUED)													
T165/70D17	--	--	--	2601	1180	114	4.00	159 6.26	664 26.14	175 6.89	682 26.85	811 31.93	***4T, 4½T, 5J, 5½J, 6J
T135/70D18	--	--	--	1984	900	104	4.00	138 5.43	647 25.47	152 5.98	665 26.18	774 30.47	***4T, 4½T, 5J
T145/70D18	--	--	--	2149	975	107	4.00	145 5.71	661 26.02	160 6.30	679 26.73	796 31.34	***4T, 4½T, 5J
T155/70D18	--	--	--	2469	1120	112	4.00	152 5.98	675 26.57	168 6.61	693 27.28	816 32.13	***4T, 4½T, 5J, 5½J
T165/70D18	--	--	--	2756	1250	116	4.00	159 6.26	689 27.13	175 6.89	707 27.83	836 32.91	***4T, 4½T, 5J, 5½J, 6J
65 SERIES													
T145/65D18	--	--	--	1929	875	103	4.00	145 5.71	645 25.39	160 6.30	663 26.10	780 30.71	4T, 4½T, 5J
60 SERIES													
T135/60D16	--	--	--	1389	630	92	4.00	138 5.43	568 22.36	152 5.98	586 23.07	696 27.40	4T, 4½T, 5J
T185/60D17	1874	850	102	--	--	--	5.00	184 7.24	654 25.75	203 7.99	672 26.46	826 32.52	4½T, 5J
T135/60D18	--	--	--	1565	710	96	4.00	138 5.43	619 24.37	152 5.98	637 25.08	747 29.41	4T, 4½T, 5J
T135/60D19	--	--	--	1565	710	96	4.00	138 5.43	645 25.39	152 5.98	663 26.10	773 30.43	4T, 4½T, 5J
55 SERIES													
T185/55D18	--	--	--	2271	1030	109	5.00	184 7.24	661 26.02	203 7.99	679 26.73	833 32.80	***4½T, 5J, 5½J, 6J, 6½J

*Maximum dimensions of grown tires in service for use by vehicle manufacturers in designing for tire clearances.

**Based on Highway Tread and Measuring Rim Width.

***For approved rim contours for these sizes, "J" and "B" rims are acceptable where "T" is specified, and "B" rims are acceptable where "J" is specified

The Tire and Rim Association has adopted an official equivalency of kPa to psi values. The first number reflects the official conversion and the second number reflects the previous value.

However, as of the printing of this Year Book, 420 kPa is the only recognized inflation pressure in the USA National Highway Traffic Safety Administration regulations.

NOTES 1: In order to provide for design differences and manufacturing tolerances:

(Calculate in S.I. units and round to closest mm, then convert to Customary units.)

a) Overall new tire widths may exceed the above design new tire section widths by 7% or 10mm (whichever is larger).

b) Overall new tire diameters may exceed the above design new tire diameters by 7% of the difference between the design new tire overall diameters and the nominal rim diameters or +16 mm (whichever is larger).

2: Rim valves for tubeless operations: TR 416S, TR 413.

3: Valve holes must conform to standards shown on page 8-69.

4: See Section 8 for 4T and 4 1/2T rim contour dimensions.

5: J contours are also approved in the same widths wherever T rim contours are shown in above tables.

FOR RIM AND WHEEL LOAD INFORMATION, SEE NOTE 9, PAGE 1-45.