



May 23, 2005

Dr. Jeffrey Runge, Administrator
National Highway Traffic Safety Administration
U.S. Department of Transportation
400 7th Street, S.W.
Washington, D.C. 20590

**Petition for Reconsideration of Tire Pressure Monitoring Systems,
Controls and Displays, Final Rule; 70 FR 18136 *et seq.*, April 8, 2005**

Dear Administrator Runge:

Public Citizen submits the following petition for reconsideration to the National Highway Traffic Safety Administration's (NHTSA) final rule establishing FMVSS 138, Tire Pressure Monitoring Systems, and the associated telltale requirements in FMVSS 101, Controls and Displays.

The April 8 final rule does not require that tire pressure monitoring systems (TPMS) function with replacement tires. This petition seeks amendments to the final rule that would require that TPMS function with most full-sized replacement tires, or, at a minimum, with an identified set of manufacturer-recommended replacement tires.

NHTSA Fails to Require TPMS Operability with Replacement Tires, Yet Most Driving is Done on Replacement Tires

It is intolerable that a TPMS rule that was mandated by Congress in the wake of the Ford-Firestone debacle and that is supposed to offer improved tire safety to Americans *fails to ensure safety benefits for most of a vehicle's span of operation*. As Rubber Manufacturers Association (RMA) has noted in comments, NHTSA acknowledges that the replacement of original equipment tires is a "clearly foreseeable event."¹ Both NHTSA's data and data submitted by RMA demonstrate that a vehicle's tires must be changed at least 2 to 3 times over the course of a vehicle's driving life.

In its Final Regulatory Impact Analysis, NHTSA admits that the large majority of driving is done on replacement tires rather than original equipment tires. The agency estimates that tires, on average, last for 45,000 miles, while passenger cars and light trucks have an average lifespan of 126,678 and 153,319 miles, respectively. Based on

these assumptions, NHTSA found that potentially 64 percent of passenger car and 71 percent of light truck mileage is driven on replacement tires. This is 67 percent of the mileage for the combined passenger vehicle fleet.² In other words, the agency estimates that the occupants of an average vehicle cannot be assured of TPMS function during the considerable majority of a vehicle's driving life.

The Agency Fails Consumers, Who Will Not Know if Replacement Tires Are TPMS-Compatible Until They Are Mounted On the Vehicle

NHTSA identifies three primary factors that might cause some replacement tires to be incompatible with TPMS, including 1) the carbon content of the tire, 2) steel in the sidewall of the tire, and 3) the use of run-flat tires. According to the agency, the carbon content of some tires could weaken the sensor signal, rendering the TPMS inoperable, as can steel belts in the sidewall of a tire. In addition, run-flat tires work on some TPMSs, but not on others.

However, NHTSA is not requiring that all passenger vehicle tires be TPMS-compatible, or on the other hand, that TPMS function with high-carbon content tires, tires with steel bands, and run-flat tires. The carbon content is not labeled on the tire or available for consumers to determine before mounting the tires on the vehicle. Steel belts in the sidewall are labeled on the tire but the labels do not provide information that would distinguish TPMS operability with those tires. And run-flat tires are clearly run-flat tires, but it has not been determined what makes some, but not other, run-flat tires compatible with a TPMS.

NHTSA claims that illumination of the malfunction telltale when a set of replacement tires are non-TPMS compatible "will provide useful information to the driver regarding the long-term operability of the TPMS, thereby increasing the overall benefits of the system."³ However, this assertion is contradicted by the agency's acknowledgement in its Final Regulatory Impact Analysis that if it arises that a set of replacement tires does not in fact function with a TPMS, consumers would likely not bother to try another set of replacement tires because of the cost and inconvenience of doing so.

Under its recent final rule, a consumer would not know if a set of replacement tires are TPMS-compatible until the tires are purchased and mounted and the consumer has been driving on the road for at least 20 minutes. NHTSA admits that this system, and the delay in critical information, is unlikely to help consumers:

If the warning lamp stays lit until the system is fixed, the agency believes that most consumers will want to have their tires changed to extinguish the lamp, until they find out what it might cost them. The question is "Who pays the bill for mounting and balancing, and in some cases, the possibility that the second set of tires will cost more than the first set chosen." This could cost \$50 or more. We assume this cost would fall upon the consumer, and not the tire dealer. If it is to

be the consumer, we believe that many will ignore the lamp or have it turned off before they will pay another \$50. We expect few consumers would go to the trouble of changing tires, just to have their malfunction lamp go off.⁴

Under the Current Rule, Hundreds of Millions of Miles a Year Would Be Traveled on Tires Incompatible with a TPMS

The current final rule would fail to extend the safety benefits of the TPMS safety standard to drivers and occupants logging hundreds of millions or more miles of travel every year. Although NHTSA assumes away any reduction in benefit of the TPMS rule due to the failure to require TPMS compatibility with replacement tires, the agency admits that “it is not known how large of a problem there is in compatibility between replacement tires and TPMS.”⁵

NHTSA notes that in 2002, RMA estimated that vehicle tires having either steel body ply cords (steel casing tires) or run-flat capability accounted for less than 0.5 percent of tires distributed in the United States.⁶ While NHTSA postulates that TPMS would probably work with some of these tires, the agency acknowledges it has no way of knowing how many incompatible tires there are or will be. Moreover, NHTSA has little information on the carbon content of tires and no count of how many tires contain too much carbon to allow proper TPMS function.

Despite this lack of hard data, the agency estimates that one percent of replacement tires will not function with TPMS. The agency goes on to postulate that if 67 percent of passenger cars and light truck mileage is done on replacement tires, then 0.677 percent of passenger vehicle mileage would be driven on TPMS-incompatible tires (1% x 67%). With the U.S. annual miles traveled at nearly 3 trillion, hundreds of millions of miles would be traveled every year on replacement tires that would prevent TPMS from functioning.⁷ In addition, *the agency admits that as much as 10 percent of replacement tires could be incompatible.*⁸

The New Final Rule Violates the Statute by Failing to Require TPMS Compatibility with Replacement Tires

The TPMS rule clearly violates TREAD’s requirement that the TPMS function with “a tire.”⁹ As the Court articulated in *Public Citizen v. Mineta*, it is contrary to the intent of Congress for the TPMS rule to permit TPMSs that fail to detect a significantly under-inflated tire. The final rule, as it does not require replacement tires to be TPMS compatible, will allow hundreds of millions of miles or more to be traveled by Americans annually on tires that may not function with TPMS, preventing drivers from being alerted when one or more of the vehicle’s tires are significantly under-inflated.

Moreover, NHTSA’s lack of adequate information on the scale of the replacement tire incompatibility problem suggests that the impact of its decision could actually be much larger and more significant than the agency estimates. “The purpose of the

statute...is to prevent motor vehicle crashes caused by significantly under-inflated tires,” stated the Court.¹⁰ Just as the Court threw out a rule that would have “exclude[ed] ‘approximately half’ of the instances in which tires are significantly under-inflated,”¹¹ it is completely unacceptable that NHTSA has issued a new final rule that omits to cover tires on which the overwhelming majority of driving is done.

The Agency’s Failure of TPMS Rule to Cover Replacement Tires Undermines the Safety Goals of the Rule

The failure of the TPMS rule to require TPMS compatibility with replacement tires is insupportable. Since a vehicle’s tires need to be changed at least 2 to 3 times in its lifetime, the use of replacement tires is a clearly foreseeable event. Moreover, NHTSA plainly states that it expects that “few consumers would go to the trouble of changing tires, just to have their malfunction lamp go off” because of the cost and inconvenience.¹²

Public confidence in and use of TPMS warnings of underinflation will be undermined by the failure of TPMS to operate with potentially many millions of tires. Consumers are likely to either ignore the continually lit malfunction indicator when the incompatible replacement tire nullifies monitoring capabilities, or have the malfunction indicator disabled. This is entirely counter to the purpose of the TPMS mandate, which was intended to warn to motorists to do a better and more frequent job of checking tire pressure levels for safety.

NHTSA Must Require TPMS Function with Virtually All Replacement Tires, and Agency Should Required Them To Work with Manufacture-Recommended Tires

NHTSA should never have let the tail wag the dog by exempting all replacement tires from the coverage of its new standard. As a safety agency, its mandate is to protect the safety of occupants on the road, and it should tailor its regulatory obligations to maximize a new standard’s protective value.

NHTSA could and should have opted to carve out the three categories of tires with which TPMS malfunction was likely, rather than crafting a wholesale exemption for all replacement tires. Although the industry presented some evidence that the malfunction of the system would be difficult to anticipate, a rule exempting all three categories of tires (high carbon content tire, steel-banded tires and run-flat tires) from mandatory compliance raises no line-drawing issues. Certainly, consumers with ordinary replacement tires are entitled to the protections offered by the rule.

If, even after full consideration of the alternative above, the agency was convinced that an exemption for such categories was unworkable, it could have required the systems to work on an identified group of manufacturer-recommended replacement tires. Identifying information for these tires could be published for consumers in the owner’s manual for a particular vehicle, allowing consumers to avoid the gamble on a replacement tire to which the agency’s rule condemns them. Compliance with the

recommended replacement tires is an eminently reasonable solution, and one which places no difficult burden on manufacturers if the agency's data regarding the number of compatible replacement tires are indeed correct.

We therefore petition the agency for: 1) a carve-out for compliance purposes for the three identified categories of potentially incompatible replacement tires (high carbon content tires, steel-banded tires and run-flat tires) with a requirement that all other tires be TPMS-compatible; or, at a minimum, 2) a requirement that the TPMS system fully function with a set of identified and published manufacturer-recommended replacement tires.

ENDNOTES

¹ 69 *Fed. Reg.* 55904. *Also see:* Comments of the Rubber Manufacturers Association, Docket No. NHTSA-2004-19054-34, Nov. 11, 2004, at 16.

² National Highway Traffic Safety Administration, "Final Regulatory Impact Analysis, Tire Pressure Monitoring System, FMVSS No. 138," Docket No. NHTSA-2005-20586-2, April 15, 2005, at II-12.

³ National Highway Traffic Safety Administration, "Tire Pressure Monitoring Systems; Controls and Displays; Final Rule," 70 FR 18136, April 15, 2005, at 18137.

⁴ National Highway Traffic Safety Administration, "Final Regulatory Impact Analysis, Tire Pressure Monitoring System, FMVSS No. 138," Docket No. NHTSA-2005-20586-2, April 15, 2005, at II-11.

⁵ National Highway Traffic Safety Administration, "Final Regulatory Impact Analysis, Tire Pressure Monitoring System, FMVSS No. 138," Docket No. NHTSA-2005-20586-2, April 15, 2005, at II-10.

⁶ Letter from Steven Butcher, Vice President, Rubber Manufacturers Association, to NHTSA, October 3 1, 2003, Docket No. NHTSA 2000-8572-282. *Also see:* National Highway Traffic Safety Administration, "Final Regulatory Impact Analysis, Tire Pressure Monitoring System, FMVSS No. 138," Docket No. NHTSA-2005-20586-2, April 15, 2005, at II-10.

⁷ National Highway Traffic Safety Administration, "2004 Early Projections," Washington, D.C.: NHTSA, April 21, 2005, at 11.

⁸ National Highway Traffic Safety Administration, "Final Regulatory Impact Analysis, Tire Pressure Monitoring System, FMVSS No. 138," Docket No. NHTSA-2005-20586-2, April 15, 2005, at II-12

⁹ TREAD Act § 13.

¹⁰ *Public Citizen v. Mineta*, Docket No. 02-4237, August 6, 2003, at 31.

¹¹ *Public Citizen v. Mineta*, Docket No. 02-4237, August 6, 2003, at 31.

¹² National Highway Traffic Safety Administration, "Final Regulatory Impact Analysis, Tire Pressure Monitoring System, FMVSS No. 138," Docket No. NHTSA-2005-20586-2, April 15, 2005, at II-11.