DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

49 CFR Parts 567, 571, 574, 575, and 597

[Docket No. NHTSA–02–13678]

RIN 2127–AI32

Tire Safety Information

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation.

ACTION: Final rule.

SUMMARY: In response to the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act of 2000, this document establishes a new Federal Motor Vehicle Safety Standard to improve the information readily available to consumers about tires. The new information will assist consumers in identifying tires that may be the subject of a safety recall. It will also increase public awareness of the importance and methods of observing motor vehicle tire load limits and maintaining proper tire inflation levels for the safe operation of a motor vehicle. This rule applies to all new and retreaded tires for use on vehicles manufactured after 1975 with a gross vehicle weight rating of 10,000 pounds or less and to all new vehicles with a gross vehicle weight rating of 10,000 pounds or less, except for motorcycles and low speed vehicles.

DATES: This final rule is effective September 1, 2003. Voluntary compliance is permitted before that time. If you wish to submit a petition for reconsideration of this rule, your petition must be received by January 2, 2003.

ADDRESSES: Petitions for reconsideration should refer to the docket number and be submitted to: Administrator, Room 5220, National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: For technical and policy issues: Mr. Roger Kurrus, Office of Planning and Consumer Programs. Telephone: (202) 366–2750. Fax: (202) 493–2290. Mr. Joseph Scott, Office of Crash Avoidance Standards, Telephone: (202) 366–2720. Fax: (202) 366–4329.

For legal issues: Nancy Bell, Attorney Advisor, Office of the Chief Counsel, NCC–20. Telephone: (202) 366–2992. Fax: (202) 366–3820.

All of these persons may be reached at the following address: National Highway Traffic Safety Administration, 400 Seventh Street, SW, Washington, DC 20590.

SUPPLEMENTARY INFORMATION:

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I. Executive Summary

A. Highlights of the Notice of Proposed Rulemaking

In the Notice of Proposed Rulemaking (NPRM) (66 FR 65536, Docket No. NHTSA–01–11157) published on December 19, 2001, the agency proposed to establish a new standard that would revise the agency's existing tire labeling requirements, as well as its current regulations to improve tire information for light vehicles (vehicles other than motorcycles and low speed vehicles (LSVs) with a gross vehicle weight rating (GVWR) of 10,000 pounds or less) and light vehicle tires and its availability and understandability to consumers. The proposal was substantially based on NHTSA's activities undertaken in response to the Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act of 2000, including publication of an ANPRM, consideration of comments in response to the ANPRM, data gathering and analysis, and NHTSA sponsored focus groups. The highlights of the proposal were as follows:

(1) *Tire Markings*—the TIN, size designation, maximum permissible inflation pressure, and maximum load rating would have been placed on both sides of light vehicle tires;

(2) *Tire Identification Number (TIN)*—(a) information in the TIN would have been reordered so that the first six characters would have contained the information required for determining whether a particular tire is subject to a recall and, (b) each TIN character would have been at least 6 mm (¼″) high;

(3) *Vehicle Placard Content and Format*—(a) the tire inflation pressure information would have been visually separated by a red colored border on the vehicle placard or, alternatively, would have been placed on a separate tire

inflation pressure label, (b) the tire inflation pressure information on the placards would have been in color (red, yellow, and black on a white background), (c) a black and white tire symbol icon (13 millimeters (.51 inches) wide and 14 millimeters (.55 inches) high) would have been in the upper left corner of the placard and label, (d) the placard and label would have both included the phrases ''Tire Information'' and ''See Owner's Manual For Additional Information'' in yellow text on a black background, (e) the statement of ''vehicle capacity weight'' on the vehicle placard would have been replaced with the following sentence: ''[t]he combined weight of occupants and cargo should never exceed XXX pounds,'' and, (f) the vehicle's recommended tire size designation would have been replaced with the tire size designation for the tire installed as original equipment on the vehicle by the vehicle manufacturer;

(4) *Placard Location*—the placard or placard and label containing tire inflation pressure by tire size and other required information specified in S4.3 of FMVSS No. 110 would have been located on the driver's side B-pillar. If a vehicle did not have a B-pillar, then the placard or placard and label would have been placed on the edge of the driver's door; and

(5) *Owner's Manual Information*—owner's manuals for light vehicles would have discussed the following five subject areas: (a) Tire labeling, (b) recommended tire inflation pressure, (c) glossary of tire terminology, (d) tire care, and (e) vehicle load limits.

Also, the agency proposed revising FMVSS No. 110, *Tire selection and rims,* for passenger cars, 49 CFR 571.110, and FMVSS No. 120 *Tire selection and rims for motor vehicles other than passenger cars,* 49 CFR 571.120, to reflect the applicability of the proposed light vehicle tire standard to vehicles with a GVWR of 10,000 pounds or less, and revising FMVSS No. 117, *Retreaded pneumatic tires,* 49 CFR 571.117, and FMVSS No. 129, *New non-pneumatic tires for passenger cars,* 49 CFR 571.129, to replace the labeling requirements contained therein with those specified in the proposed new light vehicle tire standard.

The agency proposed compliance dates for tires according to the following schedule: all passenger car (''P-metric'') tires manufactured on or after September 1, 2003, and all light truck (''LT'') tires manufactured on or after September 1, 2004, would have had to meet the new requirements. Additionally, all light vehicles manufactured on or after September 1, 2003, would have had to comply with the final rule. The agency proposed that lead-time to be consistent with the lead-time proposed for the tire performance upgrade. The aforementioned proposals are summarized more fully in section IV. of this document.

B. Highlights of the Final Rule

The final rule establishes a single standard for light vehicle tires, FMVSS No. 139, *New Pneumatic Tires for Light Vehicles.* It also contains provisions for 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. The rule applies to all new and retreaded tires for passenger cars, multipurpose passenger vehicles, trucks, buses and trailers with a gross vehicle weight rating (GVWR) of 4,536 kg (10,000 pounds) or less, manufactured after 1975, and to all passenger cars, multipurpose passenger vehicles, trucks, buses and trailers with a gross vehicle weight rating (GVWR) of 4,536 kg (10,000 pounds) or less.[1] The requirements are fully summarized in section VII.A of this document.

In response to the NPRM, NHTSA received comments from tire and vehicle manufacturers and associations, consumer advocacy groups, and the general public. After considering the public comments and other available information, the agency is modifying certain aspects of its proposal.

In particular, the agency is persuaded, for the reasons explained in section VII.C.1.d. of this document, that there are worker safety and costs issues associated with placement of the full TIN on both sidewalls of the tire. Additionally, there are technical difficulties associated with the reordering of the TIN. These amendments were proposed to aid consumers in determining whether their tires were subject to a recall. Instead, the agency is addressing the visibility of the TIN by requiring that the full TIN, as currently ordered, appear on the ''intended outboard sidewall,'' if there is one, and that either the full TIN or a partial TIN, *i.e.*, a TIN from which the date code has been deleted, appear on the opposite side of the tire. ''Intended outboard sidewall'' is defined in FMVSS No. 139 as the sidewall that contains a whitewall, bears white lettering, or bears a manufacturer or model name molding which is higher or deeper than on the other sidewall of the tire. If a tire does not have an intended outboard sidewall, the tire must be labeled with the full TIN on one sidewall and with either the full TIN or a partial TIN on the other sidewall.

The major changes to the standard (or deviations from the proposal) are as follows:

(1) The agency is not reordering the contents of the TIN.

(2) The agency is requiring the full TIN on the ''intended outboard sidewall'' of the tire and either the full TIN or a partial TIN, containing all aspects of the TIN except for the date code, on the opposite sidewall.

(3) The agency is eliminating size and format requirements for the vehicle placard and label, except for those specifying certain headings, use of the tire icon, and a limited use of color.

(4) If the vehicle does not have a driver's side-B-pillar and the driver's door edge is too narrow or does not exist, the agency is requiring that the placard or placard and label be affixed to the inward facing surface of the vehicle next to the driver's seating position.

(5) For tires, the agency is providing additional time for compliance with the new requirements as follows: 40% of all covered tires between September 1, 2004, and August 31, 2005, 70% of all covered tires between September 1, 2005, and August 31, 2006, and 100% of all covered tires beginning on September 1, 2006.

NHTSA has decided to adopt the effective date of September 1, 2003, for vehicle labeling. The effective date reflects NHTSA's desire for expedited action on this issue. In view of the urgent need to alert the public to tire and loading information and because the labeling revisions to light vehicles constitute format changes, not performance or vehicle design changes, NHTSA finds that an effective date of September 1, 2003, is reasonable and is in the public interest. The extension of the effective date for tires and the phase-in reflect the reality that the tire manufacturers will need to rework, retool, and replace the tire molds currently utilized. NHTSA believes that this phase-in will permit tire manufacturers to continue to use existing molds while they acquire new ones that reflect the new tire information requirements. Also, by only requiring that 40% of tires comply with the requirements during the first stage of the phase-in, the agency is providing the industry and its mold shops with an achievable task of reworking molds that would not exceed their capacity for such work. By not requiring full

[1] Therefore, this standard is applicable to LT tires up to load range E. This load range is typically used on large SUVs, vans, and trucks.

compliance until September 1, 2006, NHTSA is providing the tire industry with ample time to accomplish the task.

The agency estimates that one-time costs of up to $23.4 million will occur for the tire industry during the phase-in period. These costs will add up to $0.08 per tire during this period. The recurring annual costs are believed to be very minor.

Retread tires are a small part of the market for light vehicles. Because the cost to change the mold to add a second TIN or partial TIN is spread over a smaller market, the cost increase per retread tires will be higher by an unknown amount.

The agency estimates that vehicle costs will increase about $0.15 per vehicle, based on $0.04 per label and $0.11 for adding about 8 pages of information to the owner's manual. With approximately 17 million light vehicles and light trailers being sold annually, the vehicle costs will be about $2.6 million per year on a recurring annual basis.

Thus, total overall costs will be up to $26 million initially, with $2.6 million estimated to occur on a recurring annual basis.

NHTSA believes that this rule will be effective in increasing public awareness of tire safety, particularly, the understanding and maintenance of proper tire inflation and load limits. This rule will also enable consumers to identify the TIN and other tire information more easily for recalls and other notifications. The rule will standardize the location and content of important information relating to proper inflation and load limits and other tire safety concerns. By increasing consumer knowledge and awareness, this rule will lead to reduced tire failures and tire related crashes, and therefore fewer deaths and injuries.

II. Background

A. The Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act

The Transportation Recall Enhancement, Accountability, and Documentation (TREAD) Act of 2000, Pub. L. 106–414, requires the agency to address numerous matters through rulemaking. One of these matters, set forth in section 11 of the Act, is the improvement of the labeling of tires required by section 30123 of title 49, United States Code, to assist consumers in identifying tires that may be the subject of a recall. Section 11 provides that the agency must initiate a rulemaking proceeding for that purpose within 30 days after the enactment of the Act and must complete it not later than June 1, 2002.

Additionally, that section provides that the agency may take whatever additional action it deems appropriate to ensure that the public is aware of the importance of observing motor vehicle tire load limits and maintaining proper tire inflation levels for the safe operation of a motor vehicle. Section 11 states that such additional action may, for example, include a requirement that the manufacturer of motor vehicles provide the purchasers of the motor vehicles information on appropriate tire inflation levels and load limits if the agency determines that requiring such manufacturers to provide that information is the most appropriate way the information can be provided.

B. Safety Problem

1. Difficulty Locating the Tire Identification Number (TIN)

The Firestone tire recalls in 2000 highlighted the difficulty that consumers experience when attempting to determine whether a tire is subject to a recall if the tire is mounted so that the sidewall bearing the TIN and size designation faces inward, *i.e.*, underneath the vehicle.

The side of a tire bearing the TIN is often mounted so that it faces inward. In the case of whitewall tires, this occurs because the TIN is almost always molded on the blackwall (*i.e.*, inside sidewall) of the tire. Whitewall tires account for a small and declining percentage (currently about 5 percent or less) of original equipment tire sales in this country, but about 40 percent of replacement tires. There are about three times as many replacement tires as original equipment tires sold each year. Blackwall tires, which have the TIN on one sidewall, are as likely to be mounted with the number side facing in as out. Based on this information, we estimate that approximately 65 percent of all tires are mounted with their TINs not readily visible.

When tires are mounted so that the TINs appear on the inward facing sidewalls, motorists have three inconvenient options for finding and recording the TINs. They must either: (1) Slide under the vehicle with a flashlight, pencil and paper and search the inside sidewalls for the TINs; (2) remove each tire, find and record the TIN, and then replace the tire; or (3) enlist the aid of a garage or service station that can perform option 1 or place the vehicle on a vehicle lift so that the TINs can be found and recorded.

As a result of the difficulty and inconvenience of checking the TINs, the percentage of people who respond to a tire recall campaign is reduced and motorists unknowingly continue to drive their vehicles with potentially unsafe tires.

2. Misunderstanding and Dangers Associated With Inflation Pressure

As discussed in the NPRM, surveys indicate that consumers often do not realize that the recommended inflation pressure, which provides the cold tire inflation pressure for the maximum loaded vehicle weight based upon vehicle specification and operation as determined by the vehicle manufacturer, is labeled on the vehicle on a placard or the vehicle certification label by the vehicle manufacturer. Surveys also indicate that a significant number of vehicles are being operated with underinflated, overloaded and/or damaged tires and that the public needs to be reminded to inspect and properly maintain their tires.

The sidewalls of a tire used while significantly under-inflated flex more and the air temperature inside it increases, making the tire more prone to failure. In addition, a significantly under-inflated tire loses lateral traction, making handling and stopping more difficult. Under-inflated tires can contribute to various types of crashes in addition to those resulting from blow outs or tire failure, including crashes which result from: An increase in stopping distance; skidding and/or a loss of control of the vehicle in a curve or in a lane change maneuver; or hydroplaning on a wet surface.

Additionally, under-inflation contributes to tire overloading. Tire overloading describes a condition in which the vehicle is carrying more weight than the tire is rated to carry at a specified inflation pressure. For instance, for every 1-pound per square inch (psi) reduction in inflation pressure, a vehicle's tires suffer a 1.6% reduction in vehicle capacity weight (passenger plus cargo capacity). Overloading can result in handling or steering problems, brake failure, and tire failure.

As discussed in the NPRM, several crash files contain information on ''general'' tire related problems that precipitate crashes. The more recent of these files are The National Automotive Sampling System—Crashworthiness Data System (NASS–CDS) and the Fatality Analysis Reporting System (FARS). For instance, the NASS–CDS data demonstrate that about one half of one percent of all crashes are caused by these tire problems. The rate of blowout-caused crashes for light trucks (0.99 percent) is more than three times the

rate of those crashes for passenger cars (0.31 percent). Blowouts cause a much higher proportion of rollover crashes (4.81) than non-rollover crashes (0.28); and again more than three times the rate in light trucks (6.88 percent) than in passenger cars (1.87 percent). FARS data for 1995 through 1998 show that 1.10 percent of all light vehicles in fatal crashes were coded with tire problems. Light trucks had slightly higher rates of tire problems (1.20 percent) than passenger cars (1.04 percent). The annual average number of vehicles with tire problems in FARS was 535 (313 passenger cars and 222 light trucks).

C. Existing Labeling Requirements

1. Tire Sidewall Labeling

NHTSA's existing labeling requirements for new passenger car tires are set forth in Federal Motor Vehicle Safety Standard (FMVSS) No. 109, *New Pneumatic Tires—Passenger Cars* (49 CFR 571.109). Specifically, section S4.3 of FMVSS No. 109 sets forth information labeling requirements for tires, including requirements regarding the positioning of the information on the sidewall to ensure that it is readily visible and to minimize the possibility that it will be scuffed off if the sidewall hits a curb or similar object. It provides that the information listed in paragraphs S4.3 (a) through (e) (*e.g.*, number of plies and maximum permissible inflation pressure) must appear, on at least one sidewall, in an area between the maximum section width and the bead of the tire, unless the maximum section width of the tire falls between the bead and one-fourth of the distance from the bead to the shoulder of the tire.

NHTSA's labeling requirement for retreaded passenger car tires is set forth in FMVSS No. 117, *Pneumatic Retreaded Tires* (49 CFR 571.117). FMVSS No. 117 requires that each newly retreaded passenger car tire have molded into its sidewalls information similar to that required in FMVSS No. 109, plus the words ''bias,'' or ''bias belted,'' or ''radial,'' as applicable. FMVSS No. 117 does not, though, require that the name of the manufacturer or brand name and number assigned to the manufacturer be placed on retreaded tires as is required on new passenger vehicle tires by FMVSS No. 109.

NHTSA's labeling requirements for new tires for vehicles other than passenger cars are set forth in FMVSS No. 119, *New Pneumatic Tires for Vehicles other than Passenger Cars* (49 CFR 571.119). Paragraph S6.5 of FMVSS No. 119 specifies that all tires for vehicles other than passenger cars must have certain markings on the sidewalls. Among other things, these tires must show the actual number of plies in the tire, the composition of the ply cord material (S6.5(f)), and a letter designating the load range (S6.5(j)). S6.5 also provides that the designated information must appear, on at least one sidewall, in an area between the maximum section width and bead of the tire, unless the maximum section width of the tire falls between the bead and one-fourth of the distance from the bead to the shoulder of the tire. For tires for which the maximum section width falls in that area, all required labeling must be located between the bead and a point one-half the distance from the bead to the shoulder of the tire. Additionally, section S6.5(b) requires that each tire be marked with the tire identification required by part 574 of this chapter and that this number may be marked on only one sidewall.

NHTSA's labeling requirements for new temporary spare non-pneumatic tires for passenger cars are set forth in FMVSS No. 129, *New non-pneumatic tires for passenger cars* (49 CFR 571.129). The FMVSS No. 129 labeling requirements are similar to those set forth in section S4.3 in FMVSS No. 109 for size designation, load, rating, rim size and type designation, manufacturer or brand name, certification, and tire identification number. Paragraph S.4 of FMVSS No. 129 specifies that each non-pneumatic tire must have certain markings on the sidewalls including the non-pneumatic tire identification code (NPTIC), the load rating, and the tire identification number required in Part 574. These labeling requirements also specify that the labeling information must appear on both sides of the tire, except, in the case of a tire that has a particular side that must always face outward where the information must appear on the outward facing side.

2. Tire Identification Number (TIN)

Section 574.5 of Title 49, CFR, *Tire Identification Requirements,* sets forth the methods by which new tire manufacturers and new tire brand name owners must identify tires for use on motor vehicles. The section also sets forth the methods by which tire retreaders and retreaded tire brand name owners must identify tires for use on motor vehicles. The purpose of these requirements is to facilitate efforts by tire manufacturers to notify purchasers of defective or nonconforming tires and by such purchasers to identify those tires so that purchasers can take appropriate action in the interest of motor vehicle safety.

Specifically, § 574.5 requires each new tire manufacturer and each tire retreader to mold a TIN into or onto the sidewall of each tire produced, in the manner and location specified in the section and as depicted in Figures 1 and 2 of that section. The TIN is composed of four groups:

1. The first group represents the manufacturer's identification mark assigned to such manufacturer by this agency in accordance with § 574.6;

2. The second group represents the tire size for new tires; for retreaded tires, the second group represents the retread matrix in which the tire was processed or, if no matrix was used, a tire size code;

3. The third group may, at the option of the manufacturer, be used as a descriptive code for identifying significant characteristics of the tire. If the tire is produced for a brand name owner, the third grouping must identify such brand name owner; and

4. The fourth group identifies the week and year of manufacture. The first two figures identify the week, starting with ''01'' to represent the first full week of the calendar year; the second two figures represent the year. For example, ''2198'' represents the 21st week of 1998.

3. Vehicle Labeling

Labeling requirements are also contained in 49 CFR part 567, *Certification,* 49 CFR part 575, *Consumer Information Regulations,* FMVSS No. 110, *Tire Selection and Rims,* applicable to passenger cars and to non-pneumatic spare tire assemblies for use on passenger cars, and FMVSS No. 120, *Tire Selection and Rims for Motor Vehicles Other Than Passenger Cars.*

Section 567.4 requires vehicle manufacturers to affix to each vehicle a label bearing, among other things, the Gross Vehicle Weight Rating (GVWR), which must not be less than the sum of the unloaded vehicle weight, rated cargo load, and 150 pounds times the vehicles rated seating capacity; and the Gross Axle Weight Rating (GAWR), which is the value specified by the manufacturer as the load carrying capacity of a single axle system.

Paragraph S4.3 of FMVSS No. 110 requires manufacturers to affix a placard to each passenger car's glove compartment door or an equally accessible location showing the vehicle's capacity weight, designated seating capacity, the manufacturer's recommended cold tire inflation pressure for maximum loaded vehicle weight, the manufacturer's recommended tire size designation, and,

for a vehicle equipped with a non-pneumatic spare tire assembly, the non-pneumatic identification code required by FMVSS No. 129, *New Non-Pneumatic Tires for Passenger Cars.* The required information is intended to promote the vehicle's safe performance by preventing the overloading of the tires or the vehicle itself.

FMVSS No. 120 requires that each vehicle show, on the label required by 567.4, or on a tire information label (S5.3.2(b)), the recommended tire size designation appropriate for the GAWR, the size and type designation of rims appropriate for those tires, and the recommended cold inflation pressure for those tires such that the sum of the load ratings of the tires on each axle (when the tires load carrying capacity at the specified pressure is reduced by dividing 1.10, in the case of a tire subject to FMVSS No. 109, *i.e.,* a passenger car tire) is appropriate for the GAWR.

III. December 2000 Advance Notice of Proposed Rulemaking (ANPRM)

On December 1, 2000, this agency initiated rulemaking, as required by the TREAD Act, by publishing an Advance Notice of Proposed Rulemaking (ANPRM) (65 FR 75222, Docket No. NHTSA–00–8296), which announced our plans to (1) improve the labeling of tires, (2) assist consumers in identifying tires that may be the subject of a recall, and (3) ensure that the public is aware of the importance of observing motor vehicle tire load limits and maintaining proper tire inflation levels for the safe operation of a motor vehicle.

The ANPRM discussed NHTSA's existing tire information labeling and marking requirements, tire identification number requirements, and other labeling requirements such as those contained within its Consumer Information Regulations, *e.g.,* Uniform Tire Quality Grading System (''UTQGS''). Also discussed in the ANPRM were prior rulemaking actions and petitions pertinent to the tire labeling issues addressed by the TREAD Act, particularly those relevant to the location of the TIN, and underinflation and overloading concerns.

NHTSA solicited comments in areas such as general consumer knowledge and behavior, availability of information to consumers, TIN information, and other tire labeling information. The agency also asked many specific questions related to such matters such as TIN content, readability and location, worker safety and costs issues associated with labeling the TIN on both sidewalls of the tire, loading, plies and cord material, tread wear indicators, UTQGS, speed rating, run-flat and extended mobility tires, tire inflation pressure, and the dissemination of tire safety information.

IV. December 2001 Notice of Proposed Rulemaking

On December 19, 2001, the agency published an NPRM proposing to establish a new standard that would revise the agency's existing tire labeling requirements, as well as revise its current regulations to improve tire information for light vehicles (vehicles other than motorcycles and low speed vehicles (LSVs) with a GVWR of 10,000 pounds or less) and light vehicle tires and its availability and understandability to consumers.

The NPRM's proposed amendments addressed 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. The proposal would have extended all passenger car labeling requirements, including those requiring the labeling of combined occupant and cargo weight capacity and designated seating positions, to light trucks and multipurpose passenger vehicles (MPVs) with a GVWR or 10,000 pounds or less. The proposed revisions were based on consideration of comments in response to the ANPRM, data gathering and analysis, and NHTSA sponsored focus groups.

NHTSA proposed that the TIN, size designation, maximum permissible inflation pressure, and maximum load rating be placed on both sides of light vehicle tires. Requiring the TIN and size designation to be on both sides would have ensured that that information would be on the sidewall facing outward, regardless of how the tire is mounted. We also proposed requiring that the TIN appear on both sides of the tire because dual-side labeling was suggested during the congressional hearings concerning the Firestone recall. Also, based on responses to the ANPRM by the tire industry claiming a general ''safety hazard'' due to unspecified ''changes in the manufacturing process,'' and reasons provided in the NPRM, we were not then persuaded that there were significant worker safety concerns associated with this proposal. Requiring that the other items of information be on both sidewalls would have aided consumers in maintaining their tires and loading their vehicles.

NHTSA proposed two changes to the TIN. First, the agency proposed to require a re-ordering of information in the TIN so that the first six characters would have contained the information required for determining whether a particular tire is subject to a recall. The first two characters would have reflected the plant code, and the next four characters would have reflected the date code. Second, the agency proposed to require that each character be 6 mm (¼″) high. The agency believed that a requirement for a uniform TIN font size would have significantly improved the readability of the TIN.

The agency proposed four sets of revisions for the presentation of tire inflation pressure and load limit information on the vehicle placard currently required for passenger cars by S4.3 of § 571.110 and to be required for all light vehicles with a GVWR of 10,000 pounds or less.[2] The NPRM contained figures illustrating the proposed revisions to the placard. This placard, permanently affixed to the glove compartment door or an equally accessible location, currently displays the vehicle capacity weight, the designated seating capacity (expressed in terms of total number of occupants and in terms of occupants for each seat location), the vehicle manufacturer's recommended cold tire inflation pressure for maximum loaded vehicle weight, and the manufacturer's recommended tire size designation.

First, the agency proposed that tire inflation pressure information would have been visually separated by a red colored border on the vehicle placard or, alternatively, been placed on a separate tire inflation pressure label. The vehicle placard would have contained only the information that would have been required in the proposed version of S4.3 (paragraphs (a)–(e)).[3] This information would not have been combined with other labeling or certification requirements. The

[2] FMVSS No. 120 currently requires that each motor vehicle other than a passenger car show, on the label required by § 567.4, or on a tire information label (S5.3.2(b)), the recommended tire size designation appropriate for the GAWR, the tire size and type designation of rims appropriate for those tires, and the recommended cold inflation pressure for those tires such that the sum of the load ratings on the tires on each axle (when the tire's load carrying capacity at the specified pressure is reduced by dividing 1.10, in the case of a tire subject to FMVSS No. 109, *i.e.,* a passenger car tire) is appropriate for the GAWR.

[3] (a) Vehicle capacity weight expressed as ''THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED XXX POUNDS';

(b) Designated seating capacity (expressed in terms of total number of occupants and in terms of occupant for each seat location);

(c) Vehicle manufacturer's recommended cold tire inflation pressure;

(d) Tire size designation for the tire installed as original equipment on the vehicle by the vehicle manufacturer; and

(e) ''SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION''.

vehicle placard also would have had to meet the proposed color and content requirements as discussed below.

Second, the agency also proposed that the tire inflation pressure label and vehicle placard would have had to meet the following three requirements: (1) The tire inflation pressure information on the placards would have been in color—red, yellow, and black on a white background, (2) contained a black and white tire symbol icon in the upper left corner of the placards, 13 millimeters (.51 inches) wide and 14 millimeters (.55 inches), and (3) the placard and label would have both include the phrases ''Tire Information'' and ''See Owner's Manual For Additional Information'' in yellow text on a black background.

Third, the agency proposed to replace the vehicle capacity weight statement on the vehicle placard with the following sentence: ''[t]he combined weight of occupants and cargo should never exceed XXX pounds.'' The ''XXX'' amount would equal the ''vehicle capacity weight'' of the vehicle as defined in FMVSS No. 110. The information was the same as that currently required to be placed on the vehicle placard by manufacturers. However, the agency believed that the statement ''the combined weight of occupants and cargo should never exceed * * *'' would have been easier for consumers to comprehend than a technical phrase such as ''vehicle capacity weight.'' ''Vehicle capacity weight'' is not intuitive to consumers and would have required a vehicle operator to look to the owner's manual or standard to understand which factors are included in the calculation of the sum/amount on the placard.

Fourth, the agency proposed to replace the vehicle's recommended tire size designation with the tire size designation for the tire installed as original equipment on the vehicle by the vehicle manufacturer. While in most instances these two numbers would have been identical, this minor revision would have insured that the consumer is provided with the correct tire inflation pressure information for the tire size actually installed on his vehicle as original equipment by the manufacturer.

We proposed these placard changes in response to survey and focus group data which indicated that consumers needed assistance in locating recommended tire pressures for their vehicle's tires and understanding load limits. The use of colors and a visual cue, such as a tire symbol icon, would have aided drivers in noticing and locating this imperative information. By expressing the vehicle's load limit in easily recognizable terms such as ''passenger and cargo weight'', as opposed to ''vehicle capacity weight'' the proposed placard revisions would have also aided consumers in understanding and adhering to load limit guidelines.

The agency proposed that the placard or placard and label containing tire inflation pressure by tire size and other required information specified in S4.3 of FMVSS No. 110 would have been located on the driver's side B-pillar. If a vehicle did not have a B-pillar, then the placard or placard and label would have been placed on the edge of the driver's door. Currently, S4.3 of 571.110 specifies that the vehicle placard be affixed to the glove compartment door or an equally accessible location. A standardized location for tire information placards and labels would have contributed to consumer awareness of recommended tire inflation pressures and load limits.

The agency proposed that owner's manuals for light vehicles contain discussion of the following five subject areas: (1) Tire labeling, (2) recommended tire inflation pressure, (3) glossary of tire terminology, (4) tire care, and (5) vehicle load limits. A single, reliable source containing the proposed required information for the tires and tire safety information listed above would have aided consumers by providing to them, in one centralized location, the information that they needed to properly maintain their tires and adhere to recommended load limits.

Finally, the agency proposed revising FMVSS Nos. 110, *Tire selection and rims,* for passenger cars, 49 CFR 571.110, and 120 *Tire selection and rims for motor vehicles other than passenger cars,* 49 CFR 571.120, which would have reflected the applicability of the proposed light vehicle tire standard to vehicles with a GVWR of 10,000 pounds or less, and revising FMVSS Nos. 117, *Retreaded pneumatic tires,* 49 CFR 571.117, and 129, *New non-pneumatic tires for passenger cars,* 49 CFR 571.129, which would have replaced the labeling requirements contained therein with those specified in the proposed new light vehicle tire standard.

The agency proposed compliance dates for tires according to the following schedule: all P-metric tires manufactured on or after September 1, 2003, and all LT tires manufactured on or after September 1, 2004 would have had to meet the new requirements. Additionally, all light vehicles manufactured on or after September 1, 2003 would have had to comply with the final rule.

NHTSA believed that this proposal would have resulted in minimal costs for tire and manufacturers. NHTSA estimated that the added cost for labeling tires under this proposal would have equaled $0.01 per tire or less and a minimal cost for vehicle labeling (one-time costs to change production for the new vehicle placard and/or tire inflation pressure label, the application of the vehicle placard and/or tire inflation pressure label to all light vehicles, not only passenger cars, and the new owner's manual pages). NHTSA estimated that, adding the total tire and vehicle manufacturing costs together, the total annual costs would have equaled approximately $5.5 million.

V. Summary of Public Comments on NPRM

NHTSA received over 30 comments on the December 2001 NPRM. The comments were submitted by: vehicle and tire manufacturers and associations, consumer advocacy organizations and individual members of the public. The comments are summarized below.

A. Tire Sidewall Labeling

1. Maximum Permissible Inflation Pressure

- Consumers Union (''CU''), General Motors North America (''GM''), DaimlerChrysler (''DC''), International Tire & Rubber Association (''ITRA'') and Tire Association of North America (''TANA'') support maintaining the maximum inflation pressure on the tire sidewalls to prevent overinflation, to provide a level of inflation that is not a durability concern. CU and DC also suggest adding additional wording to the sidewall to direct one to the vehicle placard or owner's manual to the recommended inflation pressure.
- Rubber Manufacturers Association (''RMA''), Japan Automobile Tyre Manufacturers Association, Inc. (''JATMA''), Ford Motor Company (''Ford''), and UN/ECE Group for Global Technical Regulations for Vehicle Tyres (''GRRF'') support removing the maximum inflation pressure from the sidewall. JATMA and Ford state that different inflation pressures indicated by tire and vehicle manufacturers would cause confusion. Ford recommends that the maximum inflation pressure information be replaced with ''See Vehicle Placard for Recommended Tire Pressure.'' RMA and GRRF believe that the revised vehicle placard and owner's manual information is a better way of communicating correct inflation pressure and removal would encourage users to seek out the correct inflation pressure.

• RMA states that the NHTSA proposal would require establishment of new maximum permissible inflation pressures for light truck tires that are higher than the current marked pressure and are the minimum pressures required for the maximum load rating, not maximum pressures that are increased for operation at specific service conditions (Tire and Rim Association 2001 Yearbook, page 2–04). Also, RMA states that the requirement to stamp ''Maximum permissible inflation pressure'' on the sidewall of all light truck tires would require the reworking of all existing light truck tire molds. RMA suggests that, for LT tires, ''the terminology and definition of ''maximum permissible inflation pressure'' be replaced by ''reference inflation pressure''. RMA recommends that NHTSA adopt the following definition of this term: ''*Reference inflation pressure* means the pressure marked on the tire sidewall associated with the tire load range.''

2. Maximum Load Rating

• RMA, GRRF, JATMA, and European Tyre and Rim Technical Organisation (''ETRTO'') suggest that the maximum load rating is of no use to consumers and that it be replaced by a load index as the best way to present information to aid the consumer in choosing a suitable replacement tire for the vehicle. RMA says that the proposed maximum combined weight limit statement to be added to the vehicle placard would help consumers safely manage their vehicle/tire load capabilities.

3. Cord Material and Number of Plies

• RMA, JATMA and ETRTO suggest that information about cord material and number of plies should not be required because they are of no safety benefit to consumers. RMA also says that elimination of these labeling requirements for light vehicle tires would simplify sidewall imagery and provide for better communication of essential information and that this information is not critical to the repair, retread or recycling of passenger car tires which are rarely retreaded today. RMA comments that type and number of plies may be useful for retreading purposes for LT tires and JATMA comments that this information is relevant for consumers purchasing rayon carcass tires.

• ITRA and TANA believe it is important to leave that information on both sidewalls of the tire for the retread, repair and recycling industries. They say that this information enables the retreader or repair technician to select the proper repair materials or procedures for retreading or repairing the tires. Also, if information regarding the number of plies and cord material is removed from the sidewall, technicians cannot determine if the tire has a steel cord sidewall. This information is critical when determining if the tire is a candidate for a zipper rupture and very important in normal handling by a tire technician.

4. Speed Rating and Load Index (Service Description)

• The Alliance of Automobile Manufacturers (''Alliance'') suggests that tire sidewall labeling for tire speed rating and load index be allowed.

• RMA and Volkswagen state that the agency should require the service description to become part of the tire size information to be placed on the tire sidewall for consumer reference when ordering replacement tires. RMA states that tires are universally labeled with the service description, as illustrated on the agency's proposed tire information placard and label, and that it is very easy for consumers to match the recommended service description on their original equipment tires with the service description on replacement tires. RMA also states that for individuals who might want to see the correlation of load index numbers to pounds and kilograms, simple charts could be included in owner's manuals or made available through tire dealerships and web sites.

5. Placement of TIN

• CU, Charles West, Ford, and CIMS agree with the agency that improved access to the TIN would enhance customers' ability to determine whether their tires are covered by a recall or customer satisfaction campaign. CIMS says that the only realistic way to determine if tires are recalled is to locate a dealer who is willing to inspect the tires by putting the vehicle on an overhead lift and rotating all four tires to read the TIN. According to CIMS, this process costs conservatively $100.00 per inspection and could cost consumers hundreds of millions of dollars.

• RMA, JATMA, ITRA, TANA, Rubber Association of Canada (''RAC''), and GRRF oppose the agency's mandating that the TIN be required on both sidewalls of a tire for the following reasons: (1) The current practice in the tire industry is to locate the TIN in the bottom half of the mold and the front portion of the press to enable workers to change the weekly date code with reasonable safety without having to climb into a 350 degree upper press. If the TIN were located in a mold in the upper press as well, then to change the date code in that mold, a manufacturer would require the physical removal of the mold from the press in order to comply with OSHA's lockout/tagout regulation, 29 CFR 1910.147. This process would cause up to eight hours of downtime per press/per week. (2) The initial costs to modify all 101,148 molds for the addition of the second DOT code would be $113.5 million. The ongoing cost of changing the DOT code in the top mold would be an estimated $224.1 million per year. Further, there is insufficient global mold shop capacity to accomplish such a modification in the specified time. (3) The addition of the second TIN is a matter of very occasional convenience, not directly affecting tire safety. There are no other auto products/parts on which a part/serial number must be placed on both sides or in more than one location. (4) Marking the TIN on one sidewall could be accompanied by a requirement to identify which way the tire is to be fitted on vehicles. (5) The TIN is only necessary once the user has established whether a particular manufacturer's tire and size designation are subject to recall.

• RMA suggests three alternatives to the agency's proposal. (1) Require a partial TIN (manufacturer's identification, tire size, and optional information, but not weekly date code) on the opposite sidewall from the regular TIN. (2) Require the TIN on only one side of the tire and also show the TIN for the original equipment tires in an appropriate section of the vehicle owner's manual by means of an adhesive label. (3) Require placement of the TIN on the intended outboard side of P-metric and LT tires as indicated by the tire manufacturers.

• Specialty Tires of America and Coker Tire (''Coker'') request that specialty tires, *e.g.*, bias-ply and tires for classic and antique cars, be excluded from the requirement to mark the TIN on both sides of the tire. Coker notes that the process of producing a tire that contains a wide whitewall involves grinding a large section of the sidewall, which would result in removal of the TIN.

6. Reordering of TIN

• All commenters, except for CU, object to the rearrangement of the TIN.

• The Alliance, American Honda Motor Co., Inc. (''Honda''), RMA, ITRA, TANA, CIMS, ETRTO, RAC, and GRRF request that NHTSA maintain the current TIN groupings, format, and order for the following reasons: (1) A reordering of the TIN would confuse consumers and would require NHTSA to launch a new tire information

campaign, (2) a reordering of the TIN would confuse consumers because tires would be in circulation, for up to 12 years, with two different TIN code sequences, (3) high costs (RMA members—$83.9 million) due to need to rework tire molds, retrain dealership personnel, revise printed materials, and revise databases, (4) the agency's proposed requirements for owner's manual information would necessarily improve consumer knowledge about TIN groupings, (5) the three-digit plant code (instead of two characters for a new tire) for retreaders could not be accommodated in the newly ordered TIN, (6) the proposed positioning of the date code would not conform to foreign regulations and would be contrary to the spirit of international harmonization.

7. Height of TIN

• Advocates for Highway & Auto Safety (''Advocates'') does not support the agency's proposal to require each character of the TIN to be 6 mm or ¼″ high because they state it is a capricious choice and because the agency has not gathered information on the readability of this height of low characters. Additionally, they repeat their concern with this character size for individuals with Contrast Sensitivity Function (CFS).

• CU, RMA, ITRA and TANA support the proposed TIN height of 6mm.

• GRRF also stated that the proposed TIN height is not consistent with the draft GTR proposed height requirements.

B. Vehicle Placard and Label

1. Content

• ITRA and TANA commend NHTSA for its proposal and believe that all of these changes would help the consumer better understand their tire pressure requirements and load limits.

• RMA supports the proposed content, layout, and placement of placard, including both options. RMA also states that the agency should require a service description (load index and speed rating) as part of the tire size information shown on the vehicle placard and tire inflation pressure label because the information is important to consumers and provides the agency an opportunity for global harmonization of tire regulations.

• CU believes that tire pressure should be listed in ''psi'' first and ''kpa'' second. Additionally, CU states that the placard should (1) make clear that the combined weight of occupants and cargo or vehicle capacity weight does not include the vehicle's towing capacity and (2) should define ''cold tire pressure.''

• The Alliance, Mitsubishi Motors Corporation (''MMC''), GM, Volkswagen, and Subaru of America, Inc. (''Subaru'') state that vehicle manufacturers should be allowed to provide tire information in addition to the required fields to accommodate different speed and loading conditions, sales practices, tire/rim optional equipment, and more than one set of recommended tire pressures. The Alliance states that it is common practice to exchange tires and wheels between vehicles in a dealership's inventory and distribution of labels with original tire sizes listed would be difficult to distribute so different tire sizes should be listed on the placard. Subaru suggests permitting an additional optional tire size label or notation on the placard to indicate to see the owner's manual for optional tire size tire information.

• MMC requests that additional manufacturer production information be acceptable at the bottom part of the placard.

• The Alliance suggests that manufacturers should be permitted to provide a multi-lingual label if space permits.

• The Alliance and GM suggest that the agency use the ISO approved symbol for ''owner's manual'' in place of the phrase ''See Owner's Manual for Additional Information.'' Volkswagen recommends that the tire icon not be required on the vehicle label that shows only seating capacity and vehicle capacity weight because of space limitations and because they believe this information is not tire related.

• Subaru suggests that the placard use the heading ''original tire size'' instead of just ''tire size'' and that the text is more legible with upper and lower case lettering and that abbreviations for pounds and kilograms be permitted.

• GRRF states that only the inflation pressure at the maximum loading condition is quoted and that consumers would be better informed by recommended pressures at both a normal loading condition, *e.g.*, driver or driver and front seat passenger only, and maximum loading condition. The group, however, supports using the maximum loading condition if only one condition is chosen by the agency.

2. Format

• The Alliance supports the option to provide a single placard with all required information. It recommends that, based upon the limited space available for the location requirements, a manufacturer opting to provide tire pressure on a stand-alone label should be permitted to place the remaining information (seating capacity and loading) on the certification label. In support of this recommends, the Alliance says that the label already contains maximum loading capacity information for the vehicle and is required to be located in the driver's door area.

• MMC and GM request that NHTSA not regulate placard design, direction, and dimensions.

• ETRTO suggests that a font size equivalent to Times New Roman 20 be required in the format requirements for the placard since recommended tire inflation pressure information is vital for safety and would, it is hoped, be consulted monthly by consumers.

3. Location

• The Alliance, GM, Honda suggest that the agency adopt the same location requirement that exists in Part 567.4(c) because flexibility is needed to accommodate vehicles that do not have a conventional B-pillar or do not have enough room on the B-pillar nor sufficient room on the driver's door edge or vehicles which are right-hand drive for postal and special use.

• The Alliance also suggests that the agency include a provision that permits the manufacturer to place the Part 567 certification label on the passenger side if both the required placard and certification label cannot be accommodated on the driver's side.

• Subaru agrees with the agency that the placard should be on the B-pillar, preferably on the driver's side, and suggests that this be specified in the regulatory text.

• GRRF supports the agency's proposed location of the placard and label on the vehicle and the location of the placard/label in relation to each other.

4. Color

• The Alliance and GM oppose a multi-color requirement, arguing that it presents a significant cost burden, offers no apparent benefits, and is not a caution or warning label. They argue further that the addition of color would not aid the consumer in locating information on the placard/label or the placard/label itself.

• Volkswagen states that it would need to institute separate production and processing of the placard and tire information label because its vehicle information labels are printed on sheets of material with a uniform background color and black print.

5. Multistage Manufacturer

• The Alliance and the National Truck Equipment Association (''NTEA'')

suggest that the agency address issues related to vehicles that are manufactured in two or more stages and vehicles that are modified after primary manufacture. They state that the primary manufacturer in many cases would not have sufficient information regarding final configuration and vehicle equipment to designate seating capacity and weight limitations for occupants and cargo. NTEA further requests that actual and individual weighing not be required in order to certify the vehicle properly. NTEA also suggests that, in the event that NHTSA determines that multistage manufacturers should label each truck with information concerning seating capacity and combined occupant and cargo weight rating, there be provisions to allow for the updating of such information, through removing or covering original information with a new label, to ensure that consumers are receiving current information.

C. Owner's Manual

- CU supports the agency's proposals and rationale and suggests that it would be useful to consumers for manufacturers to provide recommended optional tire size designations in the manual.
- The Alliance urges the agency to develop tire and tire safety information with standardized language that is to be provided with a vehicle as a brochure or in an owner's manual.
- GM recommends that the agency not require actual recommended inflation pressures in the owner's manual.
- Honda comments that the glossary of tire terminology is unclear as to what terms are non-technical in S3 of Nos. 110 and 139 and suggests that NHTSA not require verbatim text in the owner's manual or that it improve the regulatory text to reflect manufacturers communications with consumers.
- Honda and the Alliance recommend that vehicle manufacturers provide an explanation of the TIN in the owner's manual to achieve improved owner understanding.
- Volkswagen suggests that owner's manual not be required to identify a specific tire size for the vehicle because owner's manuals are printed at the beginning of the production year and available tire sizes can change during the production cycle. Volkswagen also notes that manufacturers should not be restricted from adding additional information to the owner's manual.
- RMA supports the owner's manual requirements and, along with ITRA and TANA, support the requirement that the statements made in Figure 5 for ''Steps for Determining Correct Load Limit'' of the preamble appear verbatim in the owner's manual. RMA, however, along with GRRF, express concern with the statement suggesting that a pressure higher than the recommended pressure may be needed to support certain loads incorrectly indicates that tires can be loaded above their maximum capacity by increasing pressure and suggest the deletion of this statement.
- RMA recommends that the owner's manual contain instructions on the proper use of the spare tire and that it explain that correct tire inflation is vehicle specific and not contained on the sidewall. RMA also recommends that the owner's manual should define ''tire service description'' and provides a suggested definition.

D. Applicability of FMVSS Nos. 110 and 120

- The Alliance suggests that NHTSA drop the proposal to amend the applicability of FMVSS No. 110 and 120 from this rulemaking and instead incorporate them into the NPRM to be published on tire performance requirements.
- RMA and RAC state that the agency, in applying FMVSS No. 110 to light vehicles other than passenger cars, should not relax the current standards for tire selection and that load service factor of 1.10, applicable to passenger car tires for use on light trucks, vans, SUVs, and trailers, contained in S5.1.2 of FMVSS No. 120 be maintained in the new rule.

E. Costs

1. Placard and Label

- NTEA disagrees with NHTSA's estimate that there are only 4 small passenger car and light truck vehicle manufacturers in the U.S. It states that its members include close to 1,000 final stage manufacturers. NTEA also states that NHTSA's cost estimates for production and installation of the new placards and labels are not accurate for multi-stage produced vehicles and it estimates that the proposed placard would cost at least $0.25 in addition to scales and other equipment needed to determine the correct vehicle weight.
- GM states that the proposed placard/label would cost 20 cents more per label in addition to an acquisition cost of special color printers at $300,000.

2. Tires

- CU agrees with NHTSA's cost assessments of this rulemaking.
- The Alliance states that NHTSA has not accounted for the costs for computer programming code and software revisions necessary to implement changes to the TIN, including tracking dual formats, lost time, labor and resources due to errors and complexities associated with dual TIN orderings.
- RMA, GRRF, ITRA, TANA, and ETRTO believe that NHTSA substantially underestimated the costs to the tire industry. They say that these costs include loss of production, costs of modifications, and time and production costs to take molds out of production weekly to add second date code.
- RMA estimates the global cost to reorder the TIN on existing molds would be $83.9 million. The cost to add a second TIN to approximately 100,000 relevant molds (not including truck and motorcycle molds) is estimated at $113.5 million. GRRF estimates costs to U.S. tire industry at $100 million annually.
- ETRTO estimates that the costs of reworking up to 250,000 molds at $150 million and the total costs at $220 million, taking into account loss of production associated with adding a second TIN.
- ITRA and TANA note that the economic impact of this proposal, which they estimate would cost retreaders a minimum of $250 per mold, would be especially detrimental to retreaders as small business and would leave only the largest retreaders in business.

F. Effective Dates

- The Alliance recommends that NHTSA establish a uniform September 1, 2004 effective date for all vehicle requirements to permit individual vehicle manufacturers to phase-in the labeling and owner's manual information changes on a practicable and cost effective timetable. The Alliance and other vehicle industry members note that the agency should allow optional early compliance.
- GM states that an appropriate phase-in schedule cannot be determined for the changes in applicability of FMVSS Nos. 110 and 120 until they have been given an opportunity to assess the impact of the tire performance NPRM.
- RMA, RAC, ITRA, TANA and GRRF suggest that a phase-in of more than five years would be necessary to implement the changes proposed in the NPRM because the mold life expectancy is up to five years and there is not enough mold shop capacity in the world to rework the existing molds to comply with the proposed labeling. GRRF specifically requests that the effective dates be revised to apply to new tire designs, but not to existing designs,

until, at the latest, September 1, 2007 for P-metric and September 1, 2008 for LT tires.

G. Defining ''Reasonable Amount of Luggage''

• The Alliance and GM state that providing such a definition would serve no safety need and would interfere with what is a competitive matter among manufacturers. Further, they state that the agency's efforts to specify load limits on the vehicle placard and discussing load limits in the owner's manual adequately address the safety aspects of vehicle loading and obviate any need for agency to define ''reasonable amount of luggage.

• ERTRO suggests that the agency consider specifying ''maximum luggage capacity'' instead of a ''reasonable amount of luggage'' to avoid possibility of overloading.

• GRRF opposes the agency's deferring to vehicle manufacturers the responsibility for ensuring that a vehicle is equipped with tires which have a load capacity that are suitable for the declared maximum permissible mass of the vehicle or each axle of the vehicle.

H. Foreign/International Standards

• CU states that it supports NHTSA's decision to forego harmonizing or adopting foreign or international provisions because of the overriding need for providing safety information in a timely manner.

• The Alliance requests that NHTSA allow the inclusion of load indexes and speed ratings on tires.

• RMA states that the only labeling requirement in foreign standards to be including for consideration is the service description that is required by many governments around the world.

• GRRF asks NHTSA to reconsider the content of the draft harmonized regulation for tires. GRRF states that the draft is based on a global industry review of existing standards and regulations in many countries, including USA, most of Europe, Japan, China, Brazil, and Saudi Arabia and that it does not reflect the lowest common denominator in terms of performance requirements but instead seeks to move forward in the area of harmonization of tire markings in order to inform and aid the consumer.

• ETRTO suggests that complete harmonization of labeling requirements with those of ECE 30 and 54 are essential and that the safety aspects of these regulations are self-explaining since they supply a complete description of the performance characteristics of the tire and therefore allow all information necessary for an informed choice of replacement tires.

I. Prohibition on Non-Required Information

• The Alliance, GM, RMA, ITRA, TANA, GRRF and ETRTO oppose a prohibition on non-required information being placed on tires because of the global nature of the industry, because manufacturers use unique markings for marketing and production purposes, and because this action would possibly incur retaliation from other countries or constitute a technical barrier to trade.

VI. Summary of Post-Comment Period Firestone Plant Visits by NHTSA Officials

On March 13 and April 11, 2002, NHTSA personnel visited the Bridgestone-Firestone (BFS) tire manufacturing plant in Aiken, SC. This plant is the newest and most technologically advanced BFS plant and is said to be representative of the future in tire manufacturing technology. NHTSA's visit included hearing an overview of plant operations and an explanation of the tire manufacturing process, and being taken on a plant tour. During the discussion and tour, the NHTSA personnel were shown and heard descriptions of all of the key steps in the manufacturing processes, as well as quality control and safety measures. Of particular interest to the NHTSA personnel was the process of changing the TIN in the tire molds.

The presses used by BFS at this plant are the segmented hydraulic vertical lift machines. Prior to this visit, NHTSA personnel had only witnessed clam-shell presses first-hand in operation at older tire plants. These segmented presses, along with the older clam-shell presses, are the most widely used in the industry. According to RMA, the segmented machines represent an increasing percentage of presses used in the U.S. and are today considered the industry standard. Additionally, the segmented machines are more versatile than other types of presses since they can be used for molding all tires, including the higher speed rated tires requiring nylon caps that the older types of presses, including the clam-shell, cannot accommodate.

The segmented machines seen by NHTSA during the tour have a lower press and an upper press. The lower press is fixed in place directly below the upper press that is raised and lowered on a hydraulic lift. The height of the upper press at the full open position is approximately 6–7 feet above from the ground. The presses are hydraulic so they must either be in the closed or open position, they cannot be positioned in between these two extremes.

BFS provided NHTSA with a demonstration of the changing of the TIN date code in the lower mold. Workers change the TIN date by quickly leaning over the lower press and, using a hand tool, replace the old plug and/or plate with a new plate or plug. The process is not automated, according to BFS, due to the fragility of the mold.

On this type of machine, it appeared to NHTSA that any changes to the upper molds would need to be done with the molds removed from the upper press because the heat and inaccessibility of the upper mold would make it too dangerous or simply impossible, to change upper mold TINs in the upper press. This is because changing the TIN in the upper molds while the machine is in use would entail the technician's standing on the lower press while placing his head and arms directly up into the upper press. This could not be done while the machine is in use because the molds heat to approximately 350 F degrees and operate under up to 185,000 pounds of pressure. Further, the molds weigh up to 5,000 pounds each. To remove the upper mold from the machine, the upper press must be placed in the lowered position and the mold must be lifted from above using a small forklift. According to BFS, the down time necessary to enable workers to replace the date code is estimated at 4 to 6 hours. This covers allowing the mold to cool, removing the mold from the press, replacing the mold in the press, and reheating the mold. In this particular plant, there are 153 presses. This large number would, in BFS's view, make the replacement of the full TIN on a weekly basis, to accommodate the weekly changing of date code, logistically impossible. According to BFS, molds are currently removed from the upper press approximately every 20 to 30 days for cleaning.

VII. Agency Decision Regarding Final Rule

A. Summary of Final Rule and Rationale

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.

The rule applies to all new and retreaded tires for passenger cars, multipurpose passenger vehicles, trucks, buses and trailers with a gross vehicle weight rating (GVWR) of 4,536 kg (10,000 pounds) or less, manufactured after 1975, and to all passenger cars, multipurpose passenger vehicles, trucks, buses and trailers with a gross vehicle weight rating (GVWR) of 4,536 kg (10,000 pounds) or less.[4] The requirements are summarized below.

NHTSA has decided that the size designation, maximum permissible inflation pressure, and maximum load rating must be placed on both sides of light vehicle tires. The full TIN will be required on the ''intended outboard side'' of the tire and either the full TIN or a partial TIN, containing all aspects of the TIN except for the date code, will be required on the opposite side.'' ''Intended outboard sidewall'' is defined in FMVSS No. 139 as the sidewall that contains a whitewall, bears white lettering, or bears manufacturer or model name molding that is higher or deeper than that on the other sidewall of the tire. If a tire does not have an intended outboard sidewall, the tire must be labeled with the full TIN on one sidewall and with either the full TIN or a partial TIN on the other sidewall. Requiring that a form of the TIN, whether the full or partial TIN, be on both sides will ensure that important consumer information will be on the outward facing sidewall, regardless of how the tire is mounted. Requiring that the other items of information be on both sidewalls will aid consumers in properly maintaining their tires and loading their vehicles.

NHTSA is making another change to the TIN. The rule requires that each character in the TIN be 6 mm (¼″) high. The agency believes that a requirement for a uniform TIN font size will significantly improve the readability of the TIN.

The agency is making four sets of revisions to the presentation of tire inflation pressure and load limit information on the vehicle placard required for passenger cars by S4.3 of § 571.110 and to be required for all light vehicles with a GVWR of 10,000 pounds or less under this proposal.[5] This placard, permanently affixed to the glove compartment door or an equally accessible location, currently displays the vehicle capacity weight, the designated seating capacity (expressed in terms of total number of occupants and in terms of occupants for each seat location), the vehicle manufacturer's recommended cold tire inflation pressure for maximum loaded vehicle weight, and the manufacturer's recommended tire size designation.

First, the agency is requiring that tire inflation pressure information be visually separated by a red colored border from the other information on the existing vehicle placard or, alternatively, be placed on a separate tire inflation pressure label. The vehicle placard will contain only the information specified in the proposed version of S4.3 (paragraphs (a)–(e)).[6] This information will not be combined with other labeling or certification requirements. The vehicle placard will also have to meet the proposed color and content requirements as discussed below.

Second, the agency is requiring that the tire inflation pressure label and vehicle placard meet the following three requirements: (1) The tire inflation pressure information is in color—red, yellow, and black on a white background, (2) contain a black and white tire symbol icon in the upper left corner, 13 millimeters (.51 inches) wide and 14 millimeters (.55 inches) tall/high, and (3) include the phrases ''Tire and Loading Information'' and ''Tire Information'' and ''See Owner's Manual For Additional Information'' in yellow text on a black background.

Third, the agency is replacing the vehicle capacity weight statement on the vehicle placard with the following sentence: ''[t]he combined weight of occupants and cargo should never exceed XXX kg or XXX pounds.'' The ''XXX'' amount equals the ''vehicle capacity weight'' of the vehicle as defined in FMVSS No. 110. The information is the same as that currently required to be placed on the vehicle placard by manufacturers.

Fourth, the agency is replacing the vehicle's recommended tire size designation with the tire size designation for the tire installed as original equipment on the vehicle by the vehicle manufacturer. While in most instances these two numbers would be identical, this minor revision ensures that the consumer is provided with the correct tire inflation pressure information for the tire size actually installed on his vehicle as original equipment by the vehicle manufacturer. The original tire size designation and accompanying recommended inflation pressure will be indicated by the headings ''original tire size'' or ''original size'' on the placard or label

This rule requires that the placard or placard and label be located on the driver's side B-pillar. If a vehicle does not have a B-pillar, then the placard and label will be placed on the edge of the driver's door. If the vehicle does not have a driver's side B-pillar and the driver's side door edge is too narrow or does not exist, the placard or placard and label are required to be affixed to the inward facing surface of the vehicle next to the driver's seating position. Standardizing the location for tire information placards and labels will contribute to consumer awareness of recommended tire inflation pressures and load limits.

The agency is requiring that owner's manuals for light vehicles discuss the following five subject areas: (1) Tire labeling, (2) recommended tire inflation pressure, (3) glossary of tire terminology, (4) tire care, and (5) vehicle load limits. A single, reliable source containing the information listed above will aid consumers by providing the information that they need to properly maintain their tires and adhere to recommended load limits.

NHTSA believes that this rule will be effective in increasing public awareness of tire information and the understanding and maintenance of proper tire inflation and load limits. This rule will also enable consumers to more easily identify the TIN and other tire information for recalls and other notifications. The rule standardizes the location and content of important information relating to proper inflation and load limits and other tire safety concerns. These measures, by increasing consumer knowledge and awareness, will result in reduced tire failures and

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[4] Therefore, this standard is applicable to LT tires up to load range E. This load range is typically used on large SUVs, vans, and trucks.

[5] FMVSS No. 120 currently requires that each motor vehicle other than a passenger car show, on the label required by § 567.4, or on a tire information label (S5.3.2(b)), the recommended tire size designation appropriate for the GAWR, the tire size and type designation of rims appropriate for those tires, and the recommended cold inflation pressure for those tires such that the sum of the load ratings on the tires on each axle (when the tire's load carrying capacity at the specified pressure is reduced by dividing 1.10, in the case of a tire subject to FMVSS No. 109, *i.e.*, a passenger car tire) is appropriate for the GAWR.

[6] (a) Vehicle capacity weight expressed as ''THE COMBINED WEIGHT OF OCCUPANTS AND CARGO SHOULD NEVER EXCEED XXX POUNDS'';

(b) Designated seating capacity (expressed in terms of total number of occupants and in terms of occupant for each seat location);

(c) Vehicle manufacturer's recommended cold tire inflation pressure;

(d) Tire size designation for the tire installed as original equipment on the vehicle by the vehicle manufacturer; and

(e) ''SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION''.

tire related crashes, and therefore fewer deaths and injuries.

B. Summary of Key Differences Between NPRM and Final Rule

In response to the comments, the agency is modifying aspects of its proposal. Most important, the agency was persuaded, for the reasons explained below, that there are technical difficulties and safety concerns associated with placement of the full TIN on both sidewalls of the tire and the reordering of the TIN which were proposed to aid consumers in determining whether their tires are subject to a recall. Instead the agency is addressing the readability of the TIN by requiring only that the full TIN, as currently ordered, appear on the ''intended outboard sidewall,'' and either the full TIN or a partial TIN, same as full TIN currently ordered without date code, appear on the opposite side of the tire. If a tire does not have an intended outboard sidewall, the tire must be labeled with the full TIN on one sidewall and with either the full TIN or a partial TIN on the other sidewall.

The major changes to the standard (or deviations from the proposal) are summarized below.

(1) The agency is not reordering the contents of the TIN.

(2) Except as noted above, the agency is requiring the full TIN on the ''intended outboard sidewall'' of the tire and either the full TIN or a partial TIN, containing all aspects of the TIN except for the date code, on the opposite sidewall.

(3) The agency is eliminating size and format requirements for the vehicle placard and label, except for those specifying use of the tire icon and a limited use of color.

(4) If the vehicle does not have a driver's side B-pillar and the driver's side door edge is too narrow or does not exist, the agency is requiring that the placard or placard and label to be affixed to the inward facing surface of the vehicle next to the driver's seating position.

(5) For tires, the agency is extending the lead time and instituting a phase-in compliance according to the following schedule: 40% of all covered tires between September 1, 2004 and August 31, 2005, 70% of all covered tires between September 1, 2005 and August 31, 2006, and 100% of all covered tires beginning on September 1, 2006.

(6) The agency is delineating requirements for placarding and labeling of multistage manufactured and altered vehicles.

C. Labeling Requirements

1. Tire Sidewall Labeling

a. *Maximum Permissible Inflation Pressure.* 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. 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.

b. Maximum Load Rating. Several tire industry commenters suggested that the maximum load rating is of no use to consumers, especially in light of the load information proposed to be placed on the vehicle placard, and that it should be replaced by the load index requirement contained in GTS–2000 and ECE Regulation Nos. 30 and 54. The agency disagrees that the maximum load rating is of no use for consumers. The maximum load rating provides information that enables consumers to make informed decisions about towing capacity and loading conditions under certain vehicle applications. In contrast, the load index recommended by industry commenters provides a code number, not provide an actual weight

[7] FMVSS No. 119 does not contain a requirement that the maximum permissible inflation pressure be labeled on new pneumatic tires for vehicles other than passenger cars.

value, to consumers. This code number does not provide readily apparent or available information to consumers and would make it necessary for a vehicle operator to look to an index in the owner's manual or a tire industry publication to determine the actual tire maximum load. The agency does not dispute that a load index value may aid consumers when purchasing replacement tires, but it believes that a maximum load rating is more informative and necessary for consumer reference when attempting to safely load their vehicles. Further, manufacturers are welcome to add, in addition to the maximum load rating, the load index to the tire sidewall and most already do so.

c. Cord Material and Number of Plies. With regard to the number of plies and generic name of cord material used in the plies, most respondents believed that information to be of limited safety value to consumers and suggested its removal from the sidewall. The ITRA and TANA, however, expressed the view that the cord and ply material is very important to the tire retread, repair and recycling industries because this information enables consumers and industry professionals to determine the level of risk when inflating, repairing, retreading or servicing a specific tire.

NHTSA believes that it is sufficient to require that this information appear on one sidewall. Requiring that ply, cord, and tube type information only be present on one sidewall would reduce the stringency required of tires currently subject to FMVSS No. 119 (which currently requires that light truck and MPV tires display the information on both sidewalls) and would result in cost savings to manufacturers that would offset some of the increased costs resulting from changes to the TIN and the labeling of LT tires. Further, there is no known advantage that would arise from requiring this information on both sides of the tire. Therefore, cord and material and number of plies labeling will be required to be labeled on only one sidewall of the tire.

d. Placement of TIN. The agency's proposal to require the TIN to be placed on both sidewalls of the tire elicited a range of different viewpoints. Consumer commenters, CIMS and Ford stated that requiring the TIN to be placed on the outside wall of the tire was desirable since it was the only realistic way for ensuring that consumers could determine if a tire were subject to a recall without having to take the vehicle to a dealer for examination. However, all tire industry respondents object to requiring the full TIN on both sides of the tire because of the manufacturing costs and safety issues discussed above.

The agency has decided to adopt a combination of two suggestions put forth by the tire industry. The agency has decided to require that the full TIN be labeled on the ''intended outboard sidewall'' of the tire and that either the full TIN or a partial TIN, without the date code, is to be labeled on the opposite sidewall. In this rulemaking, ''intended outboard sidewall'' is defined in FMVSS No. 139 as a tire sidewall that contains a whitewall, white lettering, or manufacturer or model name molding which is higher, deeper, or than on the other side of the tire. If a tire does not have an ''intended outboard sidewall,'' the manufacturer is required to mark the full TIN on any sidewall of the tire and either the full TIN or the partial TIN on the other sidewall. In consideration of the existence of tires that do not have an ''intended outboard sidewall,'' the agency may, in a future rulemaking, consider requiring tire manufacturers to indicate, through permanent or temporary labeling of those tires, that the side of the tire containing the full TIN is to be mounted facing outward.

After reviewing comments submitted to this rulemaking and after visiting the Firestone plant, the agency concludes that it now has a factual basis for concurring with the tire industry commenters that requiring a second full TIN be molded on tires presents both significant safety and cost concerns. Today, based on the advent of the seven day-a-week operation of tire manufacturing combined with the increasingly widespread use of the segmented press, the complexion of worker safety and costs issues is different than the one that existed in 1980 during our previous rulemaking on this issue.

The agency noted in the NPRM that responses to a special order in 1980 indicated that neither costs nor worker safety were major issues because presses were non-operational 1 or 2 days a week at which time the molds could be safety worked on and, even for presses that were operational seven days a week, workers could access the upper molds by placing insulated blankets over the bottom molds. When the NPRM was issued, the agency did not have any specific factual information from the tire industry that delineated its concerns regarding worker safety or explained why worker safety would currently be an issue, as compared to in 1980.

Based on tire industry and association responses to the NPRM, and the visit to the tire plant, it now appears that, since 1980, however, plant practices have changed such that virtually all plants and their presses operate 7 days a week. Because there is no ''down time'' for the presses workers must change the TIN in the hot press or remove the mold from the presses.

Additionally, there has been technological change in the types of presses used at the plants. In 1980, the industry standard was the clam-shell press. This press opens so that the upper press opens vertically at a hinge and can be accessed relatively easily by technicians. Today, the more technologically advanced type of press is the segmented press. This press is the most common type of press used by tire manufacturers today and it has become the industry standard. As discussed above, NHTSA witnessed first-hand the serious safety concerns presented for technicians who would be changing a TIN in a hot upper mold. Because of the danger to the worker, a significant amount of down time would be needed to change the date code of the TIN on the upper mold by removing, cooling, reinstalling, and reheating the mold.

The agency, after reviewing other options than requiring the full TIN on both sidewalls, including those suggested by RMA, has decided that a partial TIN on the ''intended inboard sidewall'' of the tire would address industry safety and cost concerns and, acting as a failsafe, aid consumers in determining whether their tires are subject to a recall. According to NHTSA's records of recent recalls, 80% of tires potentially subject to a ''typical'' recall could be eliminated from the recall based on the plant code and information other than the date code contained within the TIN. NHTSA notes that a partial TIN would not have been able to eliminate a large percentage of tires from the Firestone recall because several BSFS plants were involved in that recall. NHTSA is aware of the possibility that a partial TIN code may confuse consumers (''where are the rest of the numbers?'') or that the residual 20% of consumers whose tires may be subject to a recall based on the date code may decide to ''take their chances'' with regard to taking the car into a service station to locate the date code. NHTSA, however, believes that its increased efforts to educate consumers about tire information will help remedy these potential situations and in the unlikely event that consumers needed the date code to determine whether their tires were subject to the recall and could readily view the partial TIN only, it would be in the interest of consumers to have their tires checked by a service technician if the partial TIN code matched the recall information.

The agency stated in the NPRM that most tires are symmetrical or reversible, meaning that they can be mounted

facing either direction. In practice, a majority of tires have certain aesthetic features, *e.g.*, whitewall lettering, name brand molding, that denote an ''intended outboard sidewall.'' Thus, ''intended outboard sidewall'' is defined in FMVSS No. 139 as the sidewall that contains a whitewall, bears white lettering, or bears a manufacturer or model name molding which is higher or deeper than on the other sidewall of the tire.

As discussed above, the agency learned during its visit to Firestone and subsequent information gathering that changing the TIN number plates in the tire molds would not present insurmountable safety problems if workers did not have to change the date code in the upper mold of the press on a weekly basis. NHTSA believes that advances in tire manufacturing technology, such as removable stencil plates, will allow for a significant reduction in the costs and time associated with revising the molds to contain a partial TIN on molds that do not currently accommodate a TIN plate or plug. Further, the costs associated with changing molds to implement this requirement are not considered to be onerous because technicians will be able to change partial TIN labeling information on the molds outside of the tire press during the routine cleaning and reworking of the molds that occurs every 20–30 days.

e. Reordering of TIN. All commenters who addressed this issue, except for CU, opposed a reordering of the TIN. This opposition was based mostly on concerns about the confusion for consumers and tire dealership personnel that would result from having tires in circulation, for up to 12 years from now, with two different TIN code sequences. Opponents also cited the costs of revising printed materials and databases and reeducate consumers and technicians. Commenters on the NPRM argued that the agency had provided no proven benefits for reordering of the TIN.

The agency had based its proposal on the comments on the ANPRM and the results of the focus groups that showed consistent support for making the TIN more user-friendly and readable. To that end, the agency believed that proposed revisions to the sequence of information in the TIN would have made the TIN easier for consumers to read and understand for recall and other purposes.

The arguments of the tire industry commenters, however, have merit. The agency agrees that the suggested revisions to the TIN have no proven benefit to consumers and may, in fact, prove counterproductive to its efforts to improve consumer information. NHTSA has therefore decided not to reorder the TIN. Instead, it will work to make the TIN more understandable to consumers through its consumer education efforts.

f. Height of TIN. The agency has decided to require a 6 mm (1/4'') uniform height font size to enhance the readability of the TIN. Tire manufacturer commenters and consumer commenters, except for Advocates, support the 6 mm TIN height. Advocates continues to express concern for individuals with CFS. Advocates, however, does not suggest an alternative font size.

The agency disagrees with Advocates' assertions and notes that Advocates did not provide data supporting their assertions or alternatives to the agency's proposal. The agency's proposal for a 6 mm uniform TIN height was based on previous rulemakings and comments to the ANPRM, which indicated that 4 mm was not a sufficient font size for the TIN, particularly for individuals with visual impairment. Comments on the ANPRM and NPRM and results from the focus groups concerning the readability of the TIN did not specify a particular font size and commenters, except for Advocates, did not disagree with the agency's suggestion that a uniform 6 mm TIN font height will make the TIN easier to read and would not impose a significant burden on tire manufacturers. Therefore, 6mm will be the minimum required font size and there will be no restriction that will prevent tire manufacturers from using a larger font size for the TIN characters.

g. Other. Several commenters suggested adding additional information to the tire sidewall, *e.g.*, specifying what the digits of the TIN represent, a marking requirement directing the vehicle operator to use the information contained on the vehicle placard or in the owner's manual, defining maximum permissible inflation pressure.

As stated in the NPRM, NHTSA does not believe that these suggestions are feasible. As low-profile tires are developed and become more common, there is a consequential decrease in sidewall heights. The ever-decreasing space on tire sidewalls for displaying necessary and required information will become even more important in the future and will need to be reserved for essential information. NHTSA believes the decision to add the additional items, explanations, and warnings suggested by the commenters is better left to the discretion of the tire and vehicle manufacturers and are more effectively addressed through consumer information campaigns rather than through requirements for additional on-tire information.

2. Vehicle Placard and Label

a. Revision and Upgrade of Placard and Optional Label. NHTSA has decided to amend the existing 571.110 vehicle placard requirement, including providing vehicle manufacturers two options for presenting the required placard information on their vehicles. Manufacturers will either choose to affix vehicles with the vehicle placard proposed in the NPRM or a vehicle placard and tire information label combination as proposed in the NPRM. The agency believes the modifications made by this final rule will make the tire and load information contained on vehicles more noticeable and understandable to consumers and, therefore, increase the chance that this labeling requirement can affect driver behavior to reduce tire failure and thus fatalities and injuries.

NHTSA's proposal would have required labels to conform in content, format, size, and color to the proposed placard and label. Vehicle manufacturers agreed that NHTSA should specify the label content, however, they asked for more flexibility in the areas of format and size. Vehicle manufacturers also asked to be allowed to present the text not only in English, but also in other languages.

The purpose of the improved placard and label is to make them more noticeable and more explicit. NHTSA believes that arrangement and shape of the labels is irrelevant to these purposes, and therefore, is amending the regulatory language to allow such changes. NHTSA has also re-examined the placard and label and has decided to adopt the suggestion to specify only limited format requirements with minor modifications to the proposal based on comments. These modifications and the agency's rationale for its decisions regarding the placard and the label are discussed below. The following are examples of the vehicle placard and tire inflation pressure label:

BILLING CODE 4910–59–P

Vehicle Placard

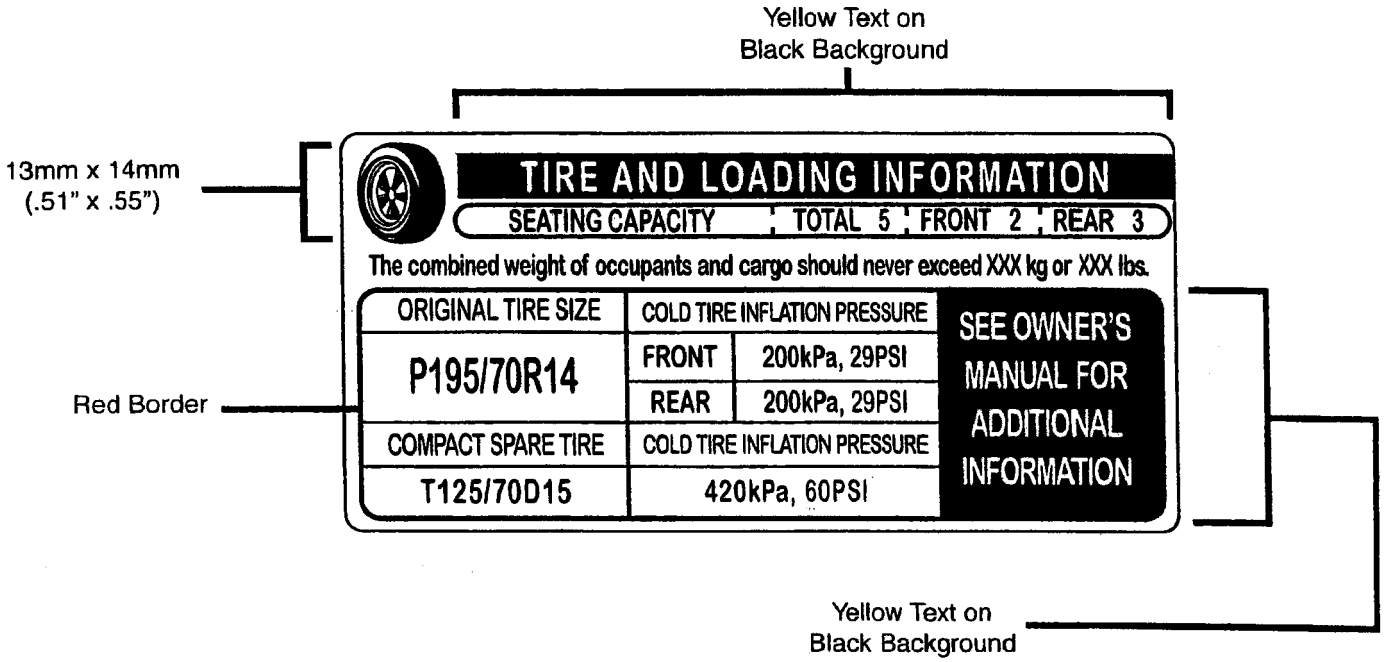

FIGURE 1

Tire Inflation Pressure Label

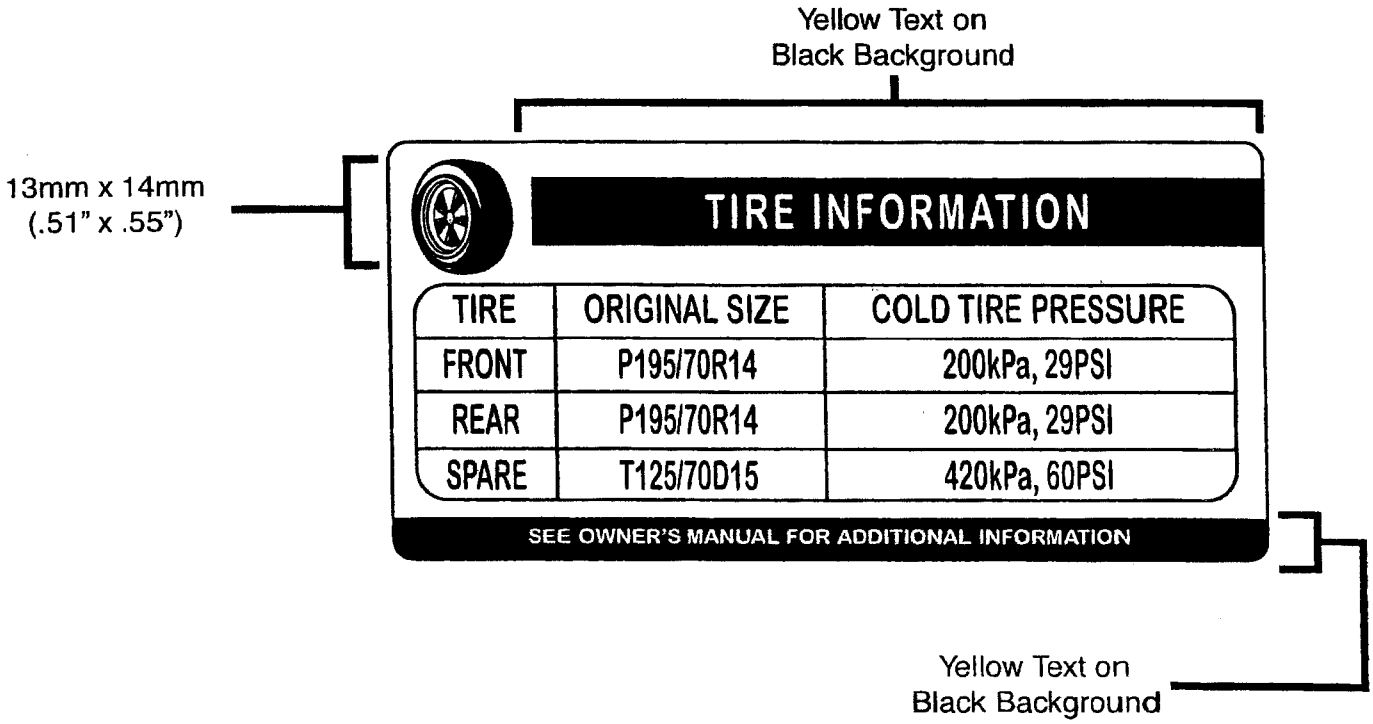

FIGURE 2

BILLING CODE 4910–59–C

The proposed placard and label contained a black and white tire symbol icon that was in the upper left hand corner of the placard and label and was 13 millimeters (.51 inches) wide and 14 millimeters (.55 inches) high. Vehicle manufacturer commenters did not state a general objection to the icon although Volkswagen commented that the icon should not be required on a placard if it only shows seating capacity and vehicle capacity weight.

Focus group participants strongly believed that a visual cue, such as a tire symbol icon, would aid drivers in identifying and locating tire information. NHTSA agrees with the participants' judgment that the icon will attract the driver's attention and will aid the driver in recognizing that the placard and label contain tire safety information. Because tire information contained on the placard and label is so critical to the safe operation of motor vehicles, NHTSA has decided to retain the tire icon requirement as specified in the proposal. NHTSA believes that consistency in graphics will prevent any confusion about the meaning of the placard and label.

With regard to Volkswagen's suggestion that the icon only appear on the label if that option is chosen, NHTSA believes the loading information remaining on the placard, which pertains to the load that can be carried at the recommended inflation pressure of the tires, is tire related and should be identified by the icon on the placard. Retaining the icon on the placard will assist participants in understanding the overall meaning/purpose of the placard even if the recommended inflation pressure is located on the label rather than on the placard. Therefore, the rule requires that the black and white tire icon symbol, as represented in Figures 1 and 2, appear on both the placard and label.

Several vehicle manufacturers opposed the use of color on the placard and label claiming high costs and lack of benefits, and that the placard and label are not caution or warning labels and therefore do not follow ANSI protocol. The agency, however, has decided to specify limited color requirements on both the placard and the label to highlight certain information. Yellow on a black background is required for the headings of the placard and label and for the phrase ''see owner's manual for additional information.'' On the vehicle placard, a red border must differentiate the tire inflation pressure information. Notwithstanding the border shown in Figures 1 and 2, manufacturers are not required to place a border around the entire placard and label.

In response to start-up and production costs for colored placards and labels asserted by certain vehicle manufacturers, the agency notes that vehicle manufacturers are already required to provide colored labels for air bag warnings and for rollover warnings for utility vehicles. Further cost issues regarding colorization of the labels will be addressed in the Costs section of this document.

With regard to the assertion that the agency's use of colors on the placard and label does not follow the American National Standards Institute (''ANSI'') protocol,[8] the agency believes the use of colors on the placard and label will draw attention to the safety information contained on the labels. This belief is supported by survey results and focus group recommendations to add color to the placard.

Survey data indicate that most individuals are unaware of the existence and/or location of the tire inflation pressure and load limit information placards. Surveys also confirm that maximum tire pressure is often confused with recommended inflation pressure. Surveys have not addressed load limit issues, but the results from NHTSA's focus groups and comments received in response to the ANPRM indicate that consumers are unaware that these limits exist, where they are located, and how to use them.

NHTSA's focus groups tested different versions of existing and proposed tire placards to help determine the most effective way of attracting the attention of consumers to this information and making it more understandable to them. In response to the testing, focus group participants overwhelmingly preferred color formats with contrasting colors, *e.g.*, yellow on black, instead of black and white formats because the color attracted their attention and aided in their comprehension of the material. Participants also strongly believed that a visual cue, such as a tire symbol icon, would aid drivers in identifying and locating this imperative information.

NTHSA recognizes that ANSI's mission in developing and issuing its standard for communicating information about a comprehensive hierarchy of hazards differs somewhat from that of the agency's in designing an effective label to convey specific information and that their conclusions about the manner of communication may differ. Given that agency's labeling decisions are highly dependent on the facts regarding the specific information being addressed, the agency will make case by case determinations of the extent to which NHTSA should follow voluntary standards versus information from other sources. As it has in this rulemaking, NHTSA will rely on its own expertise and judgment in making its determinations under statutory provisions regarding vehicle safety standards.

Vehicle manufacturer commenters suggested that the label should include the International Organization for Standardization (''ISO'')[9] symbol for owner's manual in place of a statement urging the driver to look in the vehicle owner's manual for further information. NHTSA disagrees. The statement directing consumers to the owner's manual is a very important aspect of the agency's safety message to consumers. Instead of requiring a symbol that a driver may or may not recognize, the agency believes that it is both important and appropriate to have a statement on the label reminding the driver to read the information in the owner's manual and is requiring that it be included. The agency considered allowing the ISO symbol to be included on the placard or the placard and label in addition to the statement but decided against this option because of the space constraints on the placard and the label and the need to express the required information and statements as clearly as possible.

The agency has decided to adopt the statement ''the combined weight of occupants and cargo should never exceed XXX kg or XXX pounds'' to replace the phrase ''vehicle capacity weight.'' The ''XXX'' amount will equal the vehicle capacity weight of the vehicle as defined in FMVSS No. 110. Commenters stated that the new phrase will aid consumers recognizing what factors comprise the vehicle capacity weight and what significance that weight has for the operation of a vehicle. As discussed in the NPRM, the information is the same as that currently required to be placed on the vehicle placard by manufacturers.

Today's rule requires manufacturers to label the placard and label with the tire size designation for the tire installed as original equipment on the vehicle by the vehicle manufacturer. In response to a suggestion by Subaru, the placard or label will specify that the tire size designation and accompanying

[8] ANSI is a private, non-profit organization (501(c)3) that administers and coordinates the U.S. voluntary standardization and conformity assessment system.

[9] The ISO is a worldwide federation of national standards bodies from some 140 countries, one from each country.

recommended inflation pressure be indicated by the heading ''original tire size'' or ''original size.'' This new requirement replaces that which specifies that the placard and label contain the vehicle's recommended tire size designation. While in most instances these two numbers would be identical, this minor revision insures that the consumer is provided with the correct tire inflation pressure information for the tire size actually installed on his vehicle as original equipment by the vehicle manufacturer.

As discussed in the NPRM, the agency considered adding a requirement for the vehicle manufacturer to label all recommended optional tire size designations on the vehicle placard and/or tire inflation pressure label. Additionally, some commenters, in response to the proposal, requested that the agency allow additional/optional tire sizes be listed on the placard and label.

The agency continues to believe that that allowing the addition of optional tire sizes, as well as other non-required information, to the placard and label is not appropriate, primarily because listing more than one tire size designation and the corresponding recommended inflation pressure or any additional information would require more information to be added to the already crowded vehicle placard. The agency believes that overcrowding the vehicle placard and/or tire inflation pressure label with information would discourage use of tire inflation pressure information on the placard and/or the label. Additionally, vehicle manufacturers may label this additional information on the certification label. Therefore, this rule will specify a prohibition about ''other information'' being added to the vehicle placard and label.

Manufacturers also asked to be allowed to present the label text not only in English, but also in other languages. NHTSA's current policy is to allow a required message to be stated in additional languages once the required English language message was provided. In a March 10, 1994 notice, NHTSA stated:

> NHTSA interprets the labeling requirements * * * as requiring manufacturers to supply the information in English. Once this requirement is met, manufacturers may supply the same information in other languages, so long as it does not confuse consumers. As long as the non-English language label is a translation of the required information, NHTSA does not interpret it to be ''other information.'' (59 FR 11200, at 11201–202).

As stated above, the placard and label requirements will include a prohibition against ''other information.'' NHTSA will not consider translations of the required placard and label message to be ''other information.'' However, all the requirements for the English label message must be met, including the requirement, as discussed below, that the content must be ''legible, visible, and prominent.''

The agency also concurs with this commenter's suggestion to allow abbreviations for measurements, *e.g.*, ''lbs.'' and ''kg.'' and will permit manufacturers to provide abbreviations for measurements at their discretion.

b. Location and Size. NHTSA, continues to believe that an important and overriding consumer information element of the placard and label is that they are located in an accessible and predictable location in motor vehicles. This belief was strongly supported by a focus group consensus and by comments to the NPRM.

NHTSA, in viewing a uniform location of the placard and label as a preeminent concern, has re-examined the labels, and the proposed vehicle locations for the labels, and agrees that there would be issues at some locations about the sufficiency of the space for the placement of the labels of the proposed specifications. In response to comments from manufacturers that some unspecified vehicles do not contain B-pillars or door edges, NHTSA has added a second alternative requirement to the requirement that the vehicle placard and tire inflation pressure label be located on the driver's side B-pillar. As proposed in the NPRM, the rule requires that if a vehicle does not have a B-pillar, then the placard or placard and label would be placed on the edge of the driver's door. Also with this rule, if a vehicle does not have a driver's side B-pillar and the driver's side door edge is too narrow or does not exist, the placard or placard and label are required to be affixed to the inward facing surface of the vehicle next to the driver's seating position. The agency believes that this will allow manufacturers two alternatives if it is not possible to place the placard or placard and label on the B-pillar. Allowing manufacturers to place the placard or placard and label on the inward facing surface next to the driver accommodates vehicles that do not have a driver's side B-pillar or driver's side door edge or have a driver's side door edge that is too narrow and is similar to one of the alternative placement specifications for Certification Labels in § 567.8.

In response to manufacturer concerns that it will not be feasible to fit the placard or placard and label on the B-pillar or door edge, NTHSA is not specifying a particular size, dimension or shape for the label. Despite the absence of any current requirement about placard or label size, no commenter provided an example of a vehicle placard that the commenter regarded as too small.

With respect to the size of the text on the placard and label, NHTSA learned from focus groups that the public generally prefers larger fonts in label text because it is easier to read. This helps ensure the placard and label will effectively convey the message to the reader. NHTSA, in its proposal, considered mandating a minimum font size for the text, but has not done so for two reasons. First, it is hard to specify a single font size that would assure ease of reading with all possible typefaces. Second, NHTSA does not think it necessary to specify a regulatory requirement for font size to assure that manufacturers will make the message large enough to be easily read. Additionally, NHTSA has not required any particular font face, size, or case for the vehicle placard. Manufacturers who choose the option to use both the placard and label may wish to use the same font face, size, and case in both labels. Today's rule allows them the flexibility to do so. NHTSA has, therefore, decided not to specify either a particular font face or font size or case for the placard and label. As other label sizes (*e.g.*, rollover, air bag) have not been a problem for the agency in the past, the final rule will similarly specify that the text on the placard and label be ''legible, visible, and prominent'' to the driver. If the agency becomes aware of cases in which the size of the placard's and label's text is too small, we will revise the rule to specify label and font size.

This rule also recognizes that the tire inflation pressure label will be placed proximate to the vehicle placard. A standardized location for placard and label will contribute to consumer awareness of recommended tire inflation pressure and load limits by providing a consistent and predictable place for this information. Vehicle manufacturers provided a number of alternative locations for the placard and label citing difficulties in fitting the placard or label on the B-pillar or door edge. The agency, however, notes that it has provided manufacturers with great flexibility concerning the size, shape and dimension of the placard and label. This flexibility provides manufacturers great latitude to design the placard and

label in a manner that can be configured to virtually every vehicle design. Furthermore, there would be no prohibition on placing additional tire inflation pressure labels on the vehicle in locations other than the B-pillar, except as precluded by other safety standards.

c. Multistage Manufacturer/Alterer Issues. NTEA and the Alliance commented that the proposed requirement for all light vehicles to be labeled with the vehicle capacity weight (expressed as ''the combined weight of occupants and cargo should never exceed * * *'') would create problems for manufacturers, both primary, secondary, and final, of multistage vehicles. More specifically, these commenters expressed concern that the vehicle capacity weight labeled on the placard by the primary manufacturer would be rendered invalid by subsequent modifications and, additionally, that there would be excessive costs associated with the secondary manufacturers being required to physically weigh the finished vehicle to determine the vehicle capacity weight. Additionally, NTEA suggested that alterers be permitted to replace or cover over original placards with those containing updated and accurate information for the altered vehicle.

NHTSA notes that final stage manufacturers are already required to know, before certifying the vehicle, the GVWR, the unloaded vehicle weight, and the passenger weight for the vehicle. With this information, final-stage manufacturers should be able to calculate easily the vehicle capacity weight of the vehicle. NHTSA, however, agrees with commenters that the issues regarding the placarding responsibility for multi-stage manufactured and altered vehicles need to be addressed. The agency has decided that (1) incomplete and intermediate manufacturers need not affix a placard to an incomplete vehicle, (2) alterers must affix a new placard, containing accurate information for the altered vehicle, over the placard installed by the vehicle manufacturer, so as to obscure the original placard and (3) final stage manufacturers must label vehicles with vehicle capacity weight and seating designations ''as finally manufactured,'' utilizing information contained in the document (''IVD'') required by § 568.4 to be provided by incomplete and intermediate vehicle manufacturers and the information particular to their role in the manufacture of the vehicle.

3. Owner's Manual

All commenters concurred that the owner's manual, as a single, reliable source containing the proposed required information for the tires and tire safety information listed above would aid consumers in properly maintaining their tires and adhering to load limits.

Today's rule requires owner's manuals to include the following statements and information:

1. Tire labeling, including a description and explanation of—

(a) Each marking on the tire,

(b) Locating information that will aid consumers in identifying tires subject to a recall campaign, and

(c) The TIN;

2. Recommended tire inflation pressure, including a description and explanation of—

(a) Recommended cold tire inflation pressure,

(b) The vehicle placard and tire inflation pressure label required in Federal Motor Vehicle Safety Standard No. 110 and their location in the vehicle,

(c) The adverse safety consequences of underinflation (including tire failure), and

(d) Measuring and adjusting air pressure to achieve proper inflation;

3. Glossary of tire terminology, including ''cold tire pressure,'' ''maximum inflation pressure,'' and ''recommended inflation pressure,'' and all non-technical terms defined in S3 of FMVSS Nos. 110 & 139;

4. Tire care, including maintenance and safety practices; and

5. Vehicle load limits, including a description and explanation of—

(a) Locating and understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity,

(b) Calculating total and cargo load capacities with varying seating configurations including quantitative examples showing/illustrating how the vehicle's cargo and luggage capacity decreases as the combined number and/or size of occupants increases,

(c) Determining compatibility of tire and vehicle load capabilities,

(d) The adverse safety consequences of overloading on handling and stopping and on tires, and

(e) ''Steps for Determining Correct Load Limit—

(1) Locate the statement ''The combined weight of occupants and cargo should never exceed XXX kg or XXX pounds'' on your vehicle's placard.

(2) Determine the combined weight of the driver and passengers that will be riding in your vehicle.

(3) Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.

(4) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the ''XXX'' amount equals 1400 lbs. and there will be five—150 lb passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400—750 (5 x 150) = 650 lbs.)

(5) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

(6) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this may reduce the available cargo and luggage load capacity of your vehicle.''

The agency believes that the general nature of the requirements about discussions of tire labeling, tire care, and load limit information will allow manufacturers to tailor language to their specific vehicles. At the same time, the requirements are specific enough to ensure that critical topics are included.

These statements and information are the same as those proposed in the NPRM with minor modification. NHTSA believes that the need for uniformity in 5(e) requires verbatim ''Steps for Determining Correct Load Limit'' in order to underscore that the message contained in determining the correct load limit is important for safe operation of vehicle. Number 7 in the list of steps has been deleted. RMA and GRRF expressed concern that this statement, which suggests that a pressure higher than the recommended pressure may be needed to support certain loads, incorrectly indicates that tires can be loaded above their maximum loading capacity as specified in FMVSS No. 110. The agency agrees with RMA and GRRF's concern and has deleted the statement.

Some vehicle manufacturers suggested that the agency more specifically delineate or define aspects of the information to be included in the owner's manual. The agency, however, believes that uniformity is not needed with respect to the discussion of tire safety issues other than ''Steps for Determining Correct Load Limit.'' The agency believes that manufacturers are in a better position to provide drivers with adequate explanations of tire labeling, recommended tire inflation pressure, a glossary of tire terminology, and tire care.

D. Vehicle Applicability and Effective Dates

Section 11 of the TREAD Act requires the agency to issue a final rule on this tire labeling proposal by June 1, 2002. This rule establishes that its labeling revisions apply, except where noted, to new pneumatic tires for use on motor vehicles with a GVWR of 10,000 pounds or less, manufactured after 1975, except for motorcycles and LSVs, and for new motor vehicles with a GVWR of 10,000 pounds or less.

Given the increasing consumer preference for using light trucks for passenger purposes, the agency is requiring that the tire information requirements for passenger car tires also apply to LT tires (load C, D, E) used on light trucks. No commenters dissented with the agency's statement in the NPRM that LT tires are increasingly used in the same type of on-road service as P-metric tires on light vehicles or with the agency's statement that the use of these tires on passenger vehicles will continue to increase in the near future.

As proposed in the NPRM and in response to comments suggesting technical difficulties applying labeling revisions to motorcycle tires and specialty tires produced for antique vehicles, NHTSA is not requiring that FMVSS No. 139 apply to motorcycle tires and tires for vehicles produced before 1975. The agency is currently not aware of any consumer information concerns or problems associated with motorcycle tires or tires used on antique motor vehicles.

To maintain consistent labeling requirements for all tires for use on light vehicles, the labeling requirements are also applicable to retreaded pneumatic passenger car tires and new non-pneumatic tires for passenger cars. No comments were received on the applicability of this rule to these tires.

Most vehicle manufacturer commenters requested longer lead time, until September 1, 2004. NHTSA has decided to adopt the effective date of September 1, 2003 for vehicle labeling. The proposed effective date reflected NHTSA's desire for expedited action on this issue. In view of the immediate need to alert the public to tire and loading information and because the labeling revisions to light vehicles constitute format changes, not performance or vehicle design changes, NHTSA finds that an effective date of September 1, 2003 is reasonable and is in the public interest.

All tire manufacturers requested longer lead time, up to five years, to account for reworking molds and replacing current molds, which last up to five years, with new molds reflecting the new labeling requirements. The agency agrees that providing some level of compliance flexibility improves the chances that ways can be found to improve safety as well as reduce costs. Accordingly, we have structured a phase-in to facilitate those efforts. For tires, the agency has decided to extend the lead time and institute a phase-in compliance according to the following schedule: 40% of all applicable tires between September 1, 2004 and August 31, 2005, 70% of all applicable tires between September 1, 2005 and August 31, 2006, and 100% of all applicable tires beginning on September 1, 2006. This extension of the effective date for tires and the phase-in reflects the reality that the tire manufacturers will need to rework, retool, and replace the tire molds currently being utilized. NHTSA believes that this phase-in will permit tire manufacturers to continue to use existing molds while they acquire new ones that reflect the new tire information requirements. Also, by requiring that only 40% of tires comply with the requirements during the first stage of the phase-in, the agency is providing the industry and its mold shops with an achievable task of reworking a number of molds that would not exceed their capacity for such work. By not requiring full compliance until September 1, 2006, NHTSA is providing the tire industry with ample time to accomplish the task at hand.

Finally, to encourage the earliest possible application of the new tire information requirements, NHTSA is allowing manufacturers to institute the new requirements before the required dates.

E. Other Issues and Concerns

1. Permission To Change Labeling

Today's rule does not permit manufacturers to make changes to the labeling upon seeking and receiving special permission from the Administrator. NHTSA believes that it is important that people see the same message on all covered tires and vehicles and that this message appears, where specified, in a standardized format and location. The agency believes that inconsistency with regard to the content, format, and placement of the labeling mandated in this rule could cause confusion and undermine the effectiveness of the improved tire information.

2. Modification to FMVSS Nos. 110 and 120

The purpose of FMVSS Nos. 110 and 120 is to provide safe operational performance by ensuring that vehicles to which they apply are equipped with tires of adequate load rating and rims of appropriate size and type designation. FMVSS No. 110 currently applies to passenger cars and FMVSS No. 120 currently applies to vehicles other than passenger cars including motorcycles and trailers.

This rule specifies that the applicability of FMVSS Nos. 110 and 120 will correspond with the applicability of the new light vehicle tire. FMVSS No. 110 will include passenger cars and other light vehicles with a GVWR of 10,000 pounds or less. Therefore, most SUVs, vans, trailers, and pickup trucks will be required to comply with the same tire selection and rim requirements as passenger cars. FMVSS No. 120 will continue to apply to vehicles over 10,000 pounds GVWR and motorcycles.

With regard to the revised applicability of FMVSS No. 110 and 120, the Alliance suggested that NHTSA drop the proposal to amend the applicability from this docket and instead incorporate them into the NPRM to be published on tire performance requirements. RMA and RAC urged the agency in applying FMVSS No. 110 to light vehicles other than passenger cars it should not relax the current standards for tire selection and the load service factor of 1.10 contained in S5.1.2 of FMVSS No. 120. No commenters, however, objected to the revised applicability of FMVSS No. 110 and 120.

The agency empathizes with the Alliance's wanting to comment on the applicability of performance-oriented aspects in conjunction with the NPRM on tire performance requirements. NHTSA has incorporated a discussion regarding the revised applicability of FMVSS Nos. 110 and 120 and the ensuing performance-oriented issues, including the 1.10 service factor, into the NPRM on tire performance requirements, and has provided an opportunity to comment on these issues. NHTSA will make its final decision with regard to these performance aspects of the FMVSS No. 110 and 120 applicability in the tire performance upgrade final rule.

The proposal discussed that certain performance-oriented requirements of FMVSS No. 110 would have been retained, including S4.2.2, which establishes a linkage between the

vehicle normal load [10] and the load specified for the high-speed test in FMVSS No. 109.[11] S4.2.2 would have been extended to cover SUVs, vans, trailers, and pickup trucks for the first time, which means that P-metric and LT tires used on these vehicles would have a load reserve similar to P-metric tires used on passenger cars. The proposal also noted that it would have extended S4.4.1(b) of FMVSS No. 110, which requires that each rim shall retain a deflated tire in the event of a rapid loss of inflation pressure from a vehicle speed of 97 km/h until the vehicle is stopped with a controlled braking operation, to light trucks and vans for the first time. The agency is not issuing a decision on these performance aspects in this final rule. Vehicle and tire manufacturers may comment on this issue after having an opportunity to consider the tire performance upgrade proposal.

3. Certification Label

Vehicle certification label requirements, contained in Part 567, will not be revised by this rule except to reference FMVSS No. 110, as well as FMVSS No. 120, in § 567.4 concerning tire rim combinations for light trucks and MPVs, and to require that the label contain the tire-rim combination installed as original equipment on the vehicle by the vehicle manufacturer.[12] Rim information will not, however, appear on the proposed vehicle placard or tire inflation pressure label.

4. Analysis of Responses to Agency Questions in NPRM

Should NHTSA define or specify what a ''reasonable amount of luggage is for a vehicle with an occupant in every designated seating position''?

Currently, our statute requires that a motor vehicle be equipped with tires that meet maximum load standards when the vehicle is loaded with a reasonable amount of luggage and the total number of passengers the vehicle is designed to carry.

The Alliance and GM opposed providing a definition for ''reasonable amount of luggage'' stating that it serves no safety need and would interfere with what they characterize as a ''competitive matter among manufacturers.'' ETRTO states that the agency should consider specifying ''maximum luggage capacity'' rather than a ''reasonable amount of luggage'' to avoid overloading. GRRF opposes the agency deferring to vehicle manufacturers the responsibility for ensuring that a vehicle is equipped with tires that have a load capacity suitable for the declared maximum permissible load of the vehicle or its axes.

NHTSA has decided, at this point, to rely upon its efforts in this rule and in its consumer education program to address the safety aspects of vehicle loading. In addition, consistent with their comments, the agency expects the industry to undertake educational efforts to inform the public properly with regard to particular vehicles. Whether or not these efforts will obviate the need for the agency to define ''reasonable amount of luggage'' may be evaluated by the agency at some future time.

NHTSA requests comments on which, if any, labeling requirements in any foreign or international standard should be considered by NHTSA and why.

NHTSA generally supports international harmonization in cases where such harmonization is consistent with its statutory mandate to ensure motor vehicle safety. Several vehicle industry and tire industry commenters suggested adding the service description to tires and vehicles as a labeling requirement, stating that this information aids consumers when purchasing replacement tires. The agency continues to believe the two labeling requirements contained in the service description, speed-category symbol and load index[13], have not been shown to communicate everyday tire maintenance and safety information effectively to the U.S. public. Both provide a value that is not intuitive to consumers and would require a vehicle operator to look to the owner's manual or standard to determine the actual tire maximum load and maximum rated speed of the tire. Manufacturers may continue labeling tires with this optional information but the agency will not make the service description a tire labeling requirement. Additionally, the agency will prohibit this information from being placed on the vehicle placard and label and has deleted the service description from the examples of the placard and label.

Should the agency consider prohibiting some or all non-required information from being labeled on the tire sidewalls?

All tire and vehicle industry commenters oppose a prohibition on non-required information being placed on tires. They argue that this action would generally conflict with harmonization efforts, would incur retaliation from other countries, would restrict manufacturers use of unique markings for marketing and production purposes, would restrict global marketing and therefore raise costs, and could constitute a technical barrier to trade. The agency agrees that such a prohibition would precipitate unintended consequences due to the global nature of the tire industry and give rise to greater costs for the industry and consumers. Therefore, with this rule, the agency will not prohibit non-required information on applicable tires.

VIII. Benefits

For a fuller discussion of the benefits, see the agency's Final Regulatory Evaluation (FRE). A copy of the FRE has been placed in the docket.

NHTSA believes that this final rule will be effective in increasing public awareness of tire safety, particularly the understanding and maintenance of proper tire inflation and load limits. This final rule will also enable consumers to more easily locate and identify the TIN and other tire information for recalls and other notifications. The rule will standardize the location and content of important information relating to proper inflation and load limits and other tire safety concerns. These measures, by increasing consumer knowledge and awareness, will result in reduced tire failures and tire related crashes, and therefore fewer deaths and injuries.

IX. Costs

The following is a summary of the costs associated with the final rule. For a more detailed analysis, see the agency's FRE.

The agency estimates that one-time costs of up to $23.4 million will occur for the tire industry during the phase-in period. These costs will add up to $0.08 per tire during this period. The recurring annual costs are believed to be very minor.

Estimates for retread manufacturers are projected sales figures provided from ITRA and incorporated cost estimates from RMA. Since retread

[10] Vehicle normal load on the tire means that load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

[11] This, under the proposed high speed test, would ensure at least a 15 percent load reserve (high speed test load proposed is 85 percent) when the vehicle is operated at normal load.

[12] Currently, the rim size and type designation label information requirements for light trucks and multipurpose passenger vehicles (MPVs) (which include SUVs) are specified in S5.3.2 of FMVSS No. 120. Light trucks and MPVs, unlike passenger cars, may be outfitted with different sized rims which would require different size tires and recommended inflation pressures for those tires.

[13] Under these regulations, the speed-category symbol and the load index are to be placed together near the size designation. For example, the sidewall would contain the size designation ''P215/65R15 89H'' where ''H'' is the speed-category symbol and ''89'' is the load index.

manufacturers produce about 5.47 million retread tires that will be covered by this rule, only a percentage of the approximately $23.4 million will be applicable to retreaders. This percent is calculated to be 1.93% (5.47 million (number of tread tires produced)/283 million (number of tires produced by the tire industry) × 100%). Thus, the total one-time investment cost to retread manufacturers is $451,895 (1.93% × $23,379,600) or about $0.08 per tire ($451,895/5,470,000 tires). Given that there are about 750 retread manufacturers that produce retreads for passenger cars and light trucks, the cost per manufacturer is about $603 ($451,895/750 manufacturers). The $603 per manufacturer may be a substantial underestimation, since most retread manufacturers are small companies with fewer sales over which to allocate costs than the larger tire manufacturers. However, even if costs were ten times higher for retread manufacturers ($6,030) than for other manufacturers, this amount would still represent a minimal impact to retread manufacturers.

The agency estimates that vehicle costs will increase about $0.15 per vehicle, based on $0.04 per label and $0.11 for adding about 8 pages of information to the owner's manual. With approximately 17 million light vehicles and light trailers being sold annually, the vehicle costs are over $2.6 million per year on a recurring annual basis.

Thus, total overall costs are up to $26 million initially, with $2.6 million estimated to occur on a recurring annual basis.

X. Effective Date

The Agency discusses the effective date and the phase-in requirements for this rule in section VII.D. of this document.

XI. Rulemaking Notices and Analyses

A. Executive Order 12866 and DOT Regulatory Policies and Procedures

Executive Order 12866, ''Regulatory Planning and Review'' (58 FR 51735, October 4, 1993), provides for making determinations whether a regulatory action is ''significant'' and therefore subject to Office of Management and Budget (OMB) review and to the requirements of the Executive Order. The Order defines a ''significant regulatory action'' as one that is likely to result in a rule that may:

(1) Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or Tribal governments or communities;

(2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

(3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

(4) Raise novel legal or policy issues arising out of legal mandates, the President=s priorities, or the principles set forth in the Executive Order.

NHTSA has considered the impact of this rulemaking action under Executive Order 12866 and the Department of Transportation's regulatory policies and procedures. At the time of the NPRM, this rulemaking was regarded as nonsignificant. However, due to concerns raised during a Congressional hearing in late February 2002 regarding the agency's proposals to require the full TIN on both sides of each tire and to reorder the TIN, this rulemaking was reclassified as significant. Accordingly, the Office of Management and Budget reviewed the final rule under Executive Order 12866, ''Regulatory Planning and Review.'' (As noted above, the final rule does not adopt either of those proposals, thus eliminating the sources of those concerns.) The rule is likely to result in expenditure by tire and automobile manufacturers of $26 million initially, with $2.6 million estimated to occur on a recurring annual basis. NHTSA is placing in the public docket a Final Regulatory Evaluation (FRE) describing the costs and benefits of this rulemaking action. The costs and benefits are summarized earlier in this document.

B. Regulatory Flexibility Act

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 *et seq.*) requires agencies to evaluate the potential effects of their proposed and final rules on small business, small organizations and small governmental jurisdictions. I hereby certify that the amendments would not have a significant economic impact on a substantial number of small entities.

The final rule affects motor vehicle manufacturers and tire manufacturers. The agency does not believe that any of the tire manufacturers are small businesses. However, there are about 1,000 retread manufacturers in the United States, of which about 750 deal with light vehicle tires that will in some small way be impacted by this rule. Most of these retreaders are small businesses. As discussed in Section IX. Costs, the agency estimates the cost burden imposed on retread manufacturers at approximately $600 per retread manufacturer if costs are similar to those for other tire manufacturers. Costs may be higher due to economies of scale but the agency believes that these impacts will not be economically significant. For instance, even if the costs to retread manufacturers were ten times higher than for the other manufacturers ($6,000), this figure would represent a minimal impact to retread manufacturers.

NHTSA estimates that there are only about four small passenger car and light truck vehicle manufacturers in the United States. These manufacturers serve a niche market. The agency believes that small manufacturers manufacture less than 0.1 percent of total U.S. passenger car and light truck production per year.

C. National Environmental Policy Act

NHTSA has analyzed this final rule for the purposes of the National Environmental Policy Act. The agency has determined that implementation of this action does not have any significant impact on the quality of the human environment.

D. Executive Order 13132 (Federalism)

The agency has analyzed this rulemaking in accordance with the principles and criteria contained in Executive Order 13132 and has determined that it does not have sufficient federal implications to warrant consultation with State and local officials or the preparation of a federalism summary impact statement. The final rule will not have any substantial impact on the States, or on the current Federal-State relationship, or on the current distribution of power and responsibilities among the various local officials.

E. Unfunded Mandates Act

The Unfunded Mandates Reform Act of 1995 (Public Law 104–4) requires agencies to prepare a written assessment of the costs, benefits and other effects of proposed or final rules that include a Federal mandate likely to result in the expenditure by State, local or tribal governments, in the aggregate, or by the private sector, of more than $100 million annually (adjusted annually for inflation with base year of 1995). Adjusting this amount by the implicit gross domestic product price deflator for the year 2000 results in $109 million (106.99/98.11 = 1.09). The assessment may be included in conjunction with other assessments, as it is here.

This final rule will not result in expenditures by State, local, or tribal

governments or tire suppliers of more than $109 million annually.

F. Civil Justice Reform

This final rule does not have any retroactive effect. Under 49 U.S.C. 21403, whenever a Federal motor vehicle safety standard is in effect, a State may not adopt or maintain a safety standard applicable to the same aspect of performance which is not identical to the Federal standard, except to the extent that the state requirement imposes a higher level of performance and applies only to vehicles procured for the State's use. 49 U.S.C. 21461 sets forth a procedure for judicial review of final rules establishing, amending or revoking Federal motor vehicle safety standards. That section does not require submission of a petition for reconsideration or other administrative proceedings before parties may file suit in court.

G. Paperwork Reduction Act

This final rule contains the following ''collections of information,'' as that term is defined in 5 CFR part 1320 *Controlling Paperwork Burdens on the Public:*

Tire and Vehicle Placard Labeling Requirements—The Department of Transportation is submitting the following information collection request to OMB for review and clearance under the Paperwork Reduction Act of 1995 (Pub. L. 104–13, 44 U.S.C. chapter 35).

Agency: National Highway Traffic Safety Administration (NHTSA).

Title: Tires and Rims Labeling, and Vehicle Placard Requirements.

Type of Request: Additional collection of information for an existing collection.

OMB Clearance Number: 2127–0503.

Affected Public: The tire-labeling respondents are manufacturers and retreaders of tires.

The agency estimates that there are about 8 such new tire manufacturers and 1000 retread manufacturers. The placard labeling respondents are manufacturers of MPVs covered by FMVSS 571.120. The agency estimates that there are 935 vehicle manufacturers affected by this collection.

Estimate of the Total Annual Reporting and Record Keeping Burden Resulting from the Collection of Information: NHTSA estimates that the total annual hour burden is 111,539 hours for tire labeling and 25,184 for vehicle placard requirements.

Estimated Costs: NHTSA estimates the initial cost burden for tire labeling to be $23.4 million and the annual cost burden for tire labeling to be $0. The estimated total annual cost burden for vehicle placards is approximately $0.7 million. Manufacturers will not expend any additional resources to gather additional information because they already compile this data for their own uses.

Summary of the Collection of Information: The provisions of the final rule requiring manufacturers to provide certain information on both sidewalls of tires, *e.g.*, the TIN, and certain information on a placard or label for vehicles other than passenger cars, *e.g.*, vehicle capacity weight, seating capacity, for the benefit of consumers are considered to be third-party information collection requirements as defined by the Office of Management and Budget (OMB) in 5 CFR part 1320.

Description of the Need for the Information and Proposed Use of the Information: The provisions of the final rule requiring manufacturers to provide certain information on both sidewalls of tires, *e.g.*, the TIN, and certain information on a placard or label for vehicles other than passenger cars, *e.g.*, vehicle capacity weight, seating capacity, are for the benefit of consumers. NHTSA requests comments on the agency's estimates of the total annual hour and cost burdens resulting from this collection of information. These comments must be received on or before January 17, 2003.

Vehicle Owner's Manual Requirements—The Department of Transportation is submitting the following information collection request to OMB for review and clearance under the Paperwork Reduction Act of 1995 (Pub. L. 104–13, 44 U.S.C. chapter 35).

Agency: National Highway Traffic Safety Administration (NHTSA).

Title: Consolidated Vehicle Owner's Manual Requirements of Motor Vehicles and Motor Vehicle Equipment.

Type of Request: Additional collection of information for an existing collection.

OMB Clearance Number: 2127–0541.

Affected Public: The respondents are manufacturers of motor vehicles with a gross vehicle weight rating of 10,000 pounds or less, except for motorcycles and LSVs. The agency estimates that there are 50 model lines for which there are owner's manuals. It is estimated that about 25 vehicle manufacturers are affected by this collection.

Estimate of the Total Annual Reporting and Record Keeping Burden Resulting from the Collection of Information: NHTSA estimates that the total annual hour burden is 400 hours for this information collection.

Estimated Costs: NHTSA estimates the total cost annual burden for revising the owner's manuals to be approximately $1.9 million.

Summary of the Collection of Information: The provisions of the final rule herein requiring manufacturers to provide information in owners' manuals explaining tire and vehicle load limit information for the benefit of consumers are considered to be third-party information collection requirements as defined by the Office of Management and Budget (OMB) in 5 CFR part 1320.

Description of the Need for the Information and Proposed Use of the Information: The provisions of the final rule requiring manufacturers to provide information in owners' manuals explaining tire and vehicle load limit information are for the benefit of consumers. NHTSA requests comments on the agency's estimates of the total annual hour and cost burdens resulting from this collection of information. These comments must be received on or before January 17, 2003.

Tire Manufacturer Phase-In Reporting Requirements—The Department of Transportation is submitting the following information collection request to OMB for review and clearance under the Paperwork Reduction Act of 1995 (Pub. L. 104–13, 44 U.S.C. chapter 35).

Agency: National Highway Traffic Safety Administration (NHTSA).

Title: Phase-In Production Reporting Requirements for new pneumatic tires for use on vehicle with a gross vehicle weight rating of 10,000 pounds or less.

Type of Request: Routine.

OMB Clearance Number: 2127–[XXXX].

Affected Public: The respondents are manufacturers of tires. The agency estimates that there are slightly over 1,000 such manufacturers.

Estimate of the Total Annual Reporting and Recordkeeping Burden Resulting from the Collection of Information: NHTSA estimates that the total annual hour burden is 6048 (6 man hours × 1008) hours.

Estimated Costs: NHTSA estimates that the total cost burden in dollars to be $0. Manufacturers will not expend any additional resources to gather annual production information because they already compile this data for their own uses.

Summary of the Collection of Information: This collection would require manufacturers of new pneumatic tire to provide tire production data yearly from September 1, 2004 through September 1, 2006.

Description of the Need for the Information and Proposed Use of the Information: The purpose of the reporting requirements would be to aid the National Highway Traffic safety

Administration in determining whether a manufacturer of tires has complied with the requirements of this rule during the phase-in of those requirements. NHTSA requests comments on the agency's estimates of the total annual hour and cost burdens resulting from this collection of information. The comments must be received on or before January 17, 2003.

H. Plain Language

Executive Order 12866 requires each agency to write all rules in plain language. Application of the principles of plain language includes consideration of the following questions:

- Have we organized the material to suit the public's needs?
- Are the requirements in the rule clearly stated?
- Does the rule contain technical language or jargon that isn't clear?
- Would a different format (grouping and order of sections, use of headings, paragraphing) make the rule easier to understand?
- Would more (but shorter) sections be better?
- Could we improve clarity by adding tables, lists, or diagrams?
- What else could we do to make the rule easier to understand?

XII. Regulatory Text

List of Subjects in 49 CFR Parts 567, 571, 574, 575, and 597

Imports, Certification, Consumer information, Motor vehicle safety, Motor vehicles, Rubber and rubber products, and Tires.

In consideration of the foregoing, we amend 49 CFR parts 567, 571, 574, 575 and 597 as follows:

PART 567—CERTIFICATION

1. The authority citation for part 567 continues to read as follows:

Authority: 49 U.S.C. 322, 30111, 30115, 30117, 30166, 32502, 32504, 33101–33104, 33108, and 33109; delegation of authority at 49 CFR 1.50.

2. Section 567.4 is amended by revising paragraph (h)(2) as follows:

§ 567.4 Requirements for manufacturers of motor vehicles.

* * * * *

(h) * * *

(2) (For multipurpose passenger vehicles, trucks, buses, trailers, and motorcycles) The manufacturer may, at its option, list more than one GVWR–GAWR-tire-rim combination on the label as long as the listing contains the tire-rim combination installed as original equipment on the vehicle by the vehicle manufacturer and conforms in content and format to the requirements for the tire-rim-inflation information set forth in § 571.110, § 571.120, § 571.129 and § 571.139 of this chapter.

* * * * *

PART 571—FEDERAL MOTOR VEHICLE SAFETY STANDARDS

3. The authority citation for part 571 continues to read as follows:

Authority: 49 U.S.C. 322, 2011, 30115, 30166 and 30177; delegation of authority at 49 CFR 1.50.

4. Section 571.109 is amended by revising S2 to read as follows:

§ 571.109 Standard No. 109; New pneumatic tires.

* * * * *

S2. *Application.* This standard applies to new pneumatic tires for use on passenger cars manufactured after 1948. However, it does not apply to any tire that has been altered so as to render impossible its use, or its repair for use, as motor vehicle equipment. In addition, S4.3 does not apply to tires certified to comply with S5.5 of § 571.139 and S4.4. does not apply to tires certified to comply with S4 of § 571.139.

* * * * *

5. Section 571.110 is amended by revising its heading and S2, S4.3, S4.3.1, and S7.2(a), by adding S4.3.2, S4.3.3, and S4.3.4, and by adding Figure 1 and Figure 2 at the end of Section 571.110, to read as follows:

§ 571.110 Standard No. 110; Tire selection and rims for motor vehicles with a GVWR of 4,536 kilograms (10,000 pounds) or less.

* * * * *

S2 *Application.* This standard applies to motor vehicles with a gross vehicle weight rating (GVWR) of 10,000 pounds or less, except for motorcycles, and to non-pneumatic spare tire assemblies for use on those vehicles.

* * * * *

S4.3 *Placard.* Each vehicle, except for an incomplete vehicle, shall show the information specified in S4.3 (a) through (g) on a placard permanently affixed to the driver's side B-pillar. If the vehicle lacks a B-pillar on the driver's side, the placard shall be permanently affixed to the edge of the driver's side door. If the vehicle lacks a driver's side B-pillar and either has a driver's side door whose edge is too narrow to permit the affixing of the placard or lacks a driver's side door, the placard shall be affixed to the inward facing surface of the vehicle next to the driver's seating position. This information shall be in the English language and conform in color and format, not including the border surrounding the entire placard, as specified in the example set forth in Figure 1 in this standard. At the manufacturer's option, the information specified in S4.3 (c) and (d) may be shown, alternatively, on a tire inflation pressure label, and conform in color and format, not including the border surrounding the entire label, as specified in the example set forth in Figure 2 in this standard. The label shall be permanently affixed and proximate to the placard required by this paragraph. The information specified in S4.3 (e) shall be shown on both the vehicle placard and on the tire inflation pressure label (if such a label is affixed to provide the information specified in S4.3 (c) and (d)) in the format and color scheme set forth in Figures 1 and 2.

(a) Vehicle capacity weight expressed as ''The combined weight of occupants and cargo should never exceed XXX kilograms or XXX pounds'';

(b) Designated seated capacity (expressed in terms of total number of occupants and number of occupants for each seat location);

(c) Vehicle manufacturer's recommended cold tire inflation pressure, subject to the limitations of 4.3.4;

(d) Tire size designation, indicated by the headings ''original tire size'' or ''original size,'' for the tire installed as original equipment on the vehicle by the vehicle manufacturer;

(e) On the vehicle placard, ''Tire and Loading Information'' and, on the tire inflation pressure label, ''Tire Information'';

(f) ''See Owner's Manual for Additional Information''; and

(g) For a vehicle equipped with a non-pneumatic assembly, the tire identification code with which that assembly is labeled pursuant to the requirements of S4.3(a) of 571.129, New Non-Pneumatic Tires for Passenger Cars.

S4.3.1 *Requirements for vehicles manufactured in two or more stages.* A placard or placard and label shall be affixed to the completed vehicle by the final-stage manufacturer in accordance with S4.3 and with the vehicle capacity weight and seating designations as finally manufactured.

S4.3.2 *Requirements for altered vehicles.* A new placard or placard and label shall be affixed, so as to obscure the original placard, to an altered vehicle that has previously been certified in accordance with § 567.4 or § 567.5, other than by the addition, substitution, or removal of readily attachable components such as mirrors or tire and rim assemblies, or minor

finishing operations such as painting, or who alters the vehicle in such a manner that its stated weight ratings are not longer valid, before the first purchase of the vehicle in good faith for purposes other than resale, containing accurate information for the altered vehicle, in accordance with S4.3.

S4.3.3 *Additional labeling information for vehicles other than passenger cars.* Each vehicle shall show the size designation and, if applicable, the type designation of rims (not necessarily those on the vehicle) appropriate for the tire appropriate for use on that vehicle, including the tire installed as original equipment on the vehicle by the vehicle manufacturer, after each GAWR listed on the certification label required by § 567.4 or § 567.5 of this chapter. This information shall be in the English language, lettered in block capitals and numerals not less than 2.4 millimeters high and in the following format:

Truck Example—Suitable Tire-Rim Choice

GVWR: 2,441 kilograms (5381 pounds).

GAWR: Front—1,299 kilograms (2,864 pounds) with P265/70R16 tires, 16 × 8.0 rims at 240 kPa (36 psi) cold single.

GAWR: Rear—1,142 kilograms (2,864 pounds) with P265/70R16 tires, 16 × 8.00 rims, at 245 kPa (36 psi) cold single.

S4.3.4 No inflation pressure other than the maximum permissible inflation pressure may be shown on the placard and, if any, tire inflation pressure label unless—

(a) It is less than the maximum permissible inflation pressure;

(b) It is appropriate for the load limits as calculated in accordance with S4.2; and

(c) The tire load rating specified in a submission by an individual manufacturer, pursuant to S4.1.1(a) of § 571.139 or contained in one of the publications described in S4.1.1.(b) of § 571.139, for the tire size at that inflation pressure is not less than the vehicle maximum load and the vehicle normal load.

* * * * *

S7.2 * * *

(a) A statement indicating the information related to appropriate use for the non-pneumatic spare tire including at a minimum the information set forth in S6 (a) and (b) and either the information set forth in S4.3(g) or a statement that the information set forth in S4.3(g) is located on the vehicle placard and on the non-pneumatic tire;

* * * * *

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Vehicle Placard

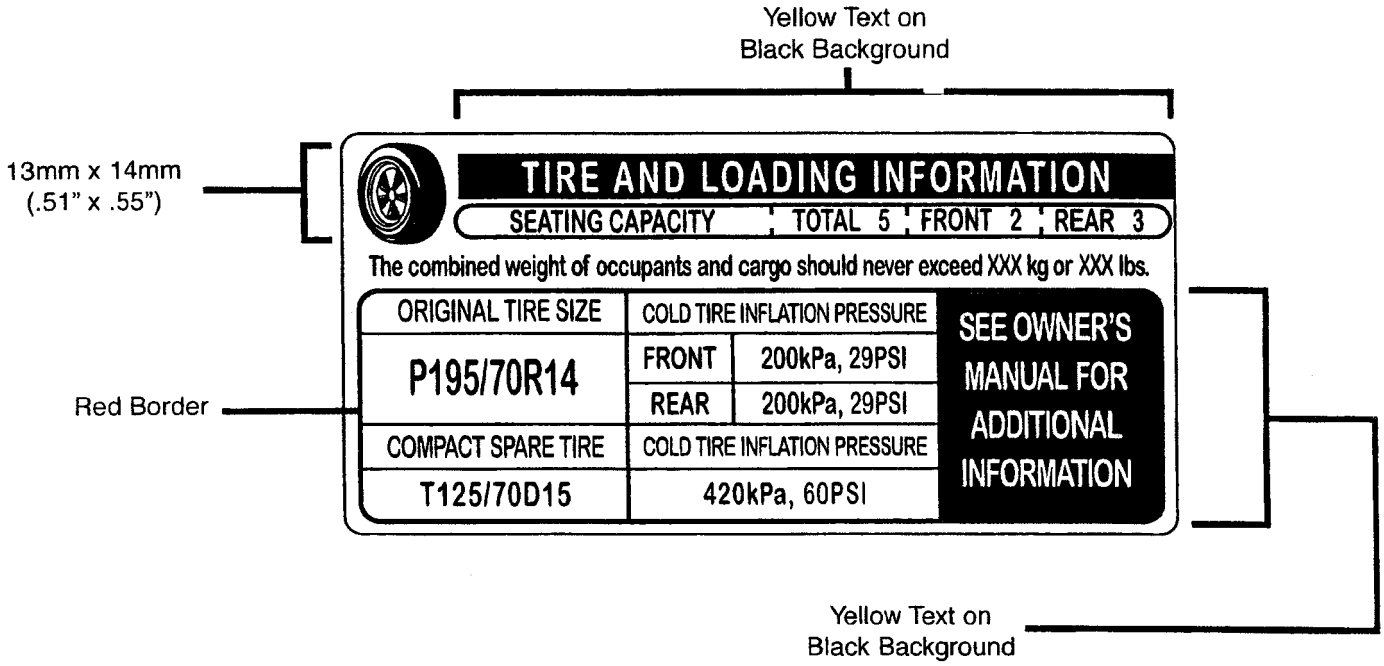

FIGURE 1

Tire Inflation Pressure Label

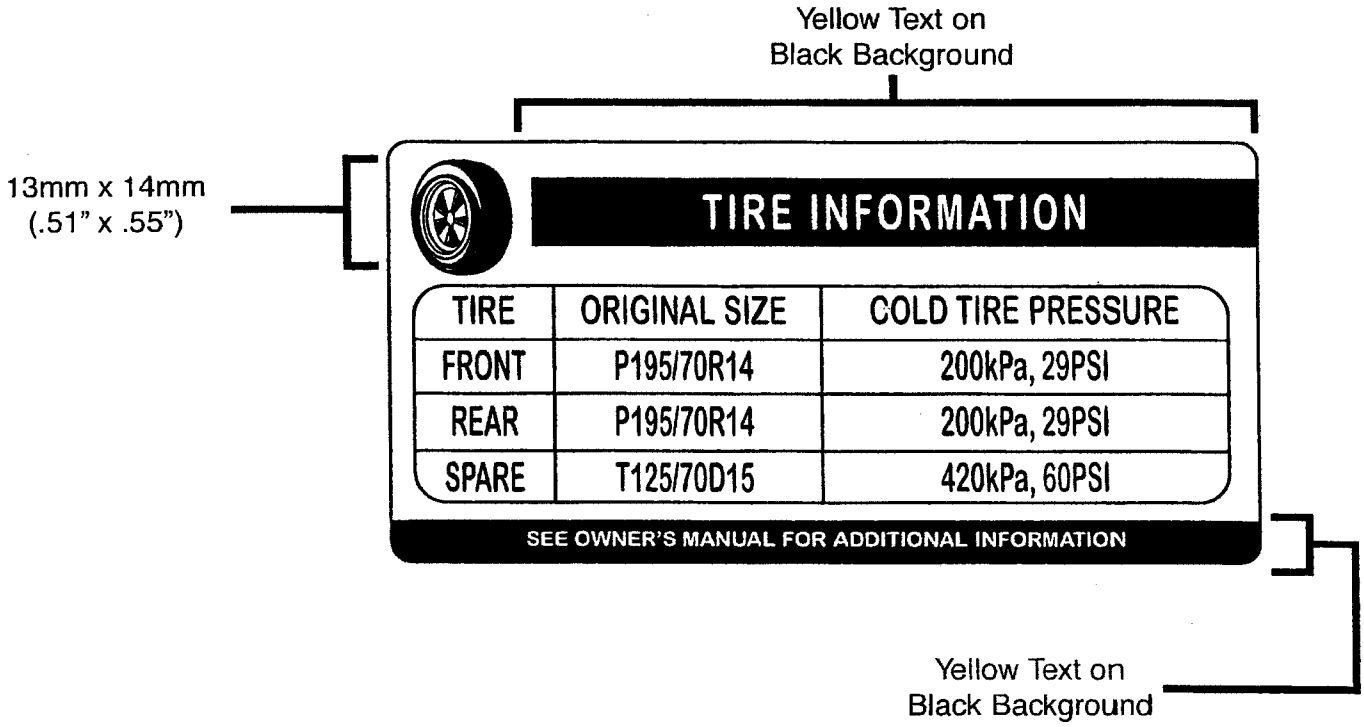

FIGURE 2

BILLING CODE 4910–59–C

6. Section 571.117 is amended by revising S6.3 (including removing Table 1 and the undesignated paragraph following S6.3(h)) and adding S7, S7.1, S7.2, and S7.3 to read as follows:

§ 571.117 Standard No. 117; Retreaded pneumatic tires.

* * * * *

S6.3 *Labeling.* Each retreaded tire shall comply, according to the phase-in schedule specified in S7 of this standard, with the requirements of S5.5. of § 571.139.

S7. *Phase-In Schedule for labeling*

S7.1 *Tires retreaded on or after September 1, 2004 and before September 1, 2005.* For tires manufactured on or after September 1, 2004 and before September 1, 2005, the number of tires complying with S6.3 of this standard must be equal to not less than 40% of the retreader's production during that period.

S7.2 *Tires retreaded on or after September 1, 2005 and before September 1, 2006.* For tires manufactured on or after September 1, 2005 and before September 1, 2006, the number of tires complying with S6.3 of this standard must be equal to not less than 70% of the retreader's production during that period.

S7.3 *Tires retreaded on or after September 1, 2006.* Each tire must comply with S6.3 of this standard.

7. Section 571.120 is amended by revising its heading, and S3 to read as follows:

§ 571.120 Standard No. 120; Tire selection and rims for motor vehicles with a GVWR of more than 4,536 kilograms (10,000 pounds).

* * * * *

S3. *Application.* This standard applies to motor vehicles with a gross vehicle weight rating (GVWR) of more than 10,000 pounds and motorcycles, to rims for use on those vehicles, and to non-pneumatic spare tire assemblies for use on those vehicles.

* * * * *

8. Section 571.129 is amended by revising S4.3 and adding S7, S7.1, S7.2, and S7.3 to read as follows:

§ 571.129 Standard No. 129; New non-pneumatic tires for passenger cars.

* * * * *

S4. * * *

S4.3. *Labeling Requirements.* Each new non-pneumatic tire shall comply, according to the phase-in schedule specified in S7 of this standard, with the requirements of S5.5 of § 571.139.

* * * * *

S7. *Phase-In Schedule for labeling requirements.*

S7.1 *Tires manufactured on or after September 1, 2004 and before September 1, 2005.* For tires manufactured on or after September 1, 2004 and before September 1, 2005, the number of tires complying with S4.3 of this standard must be equal to not less than 40% of the manufacturer's production during that period.

S7.2 *Tires manufactured on or after September 1, 2005 and before September 1, 2006.* For tires manufactured on or after September 1, 2005 and before September 1, 2006, the number of tires complying with S4.3 of this standard must be equal to not less than 70% of the manufacturer's production during that period.

S7.3 *Tires manufactured on or after September 1, 2006.* Each tire must comply with S6.3 of this standard.

* * * * *

9. Section 571.139 is added to read as follows:

§ 571.139 Standard No. 139; New pneumatic tires for light vehicles.

S1. *Scope and purpose.* This standard specifies tire dimensions, test requirements, labeling requirements, and defines tire load ratings.

S2. *Application.* This standard applies to new pneumatic tires for use on motor vehicles (other than motorcycles and low speed vehicles) that have a gross vehicle weight rating (GVWR) of 10,000 pounds or less and that were manufactured after 1975.

S3. *Definitions.*

Intended outboard sidewall means:

(1) The sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire, or

(2) The outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle.

S4. *Tire and rim matching information.*

S4.1. Each manufacturer of tires must ensure that a listing of the rims that may be used with each tire that it produces is provided to the public in accordance with S4.1.1 and S4.1.2.

S4.1.1 Each rim listing for a tire must include dimensional specifications and a diagram of the rim and must 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:

(1) The Tire and Rim Association.

(2) The European Tyre and Rim Technical Organization.

(3) Japan Automobile Tire Manufacturers' Association, Inc.

(4) Tyre & Rim Association of Australia.

(5) Associacao Latino Americana de Pneus e Aros (Brazil).

(6) South African Bureau of Standards.

S4.1.2 A listing compiled in accordance with paragraph (a) of S4.1.1 need not include dimensional specifications or a diagram of a rim whose dimensional specifications and diagram are contained in a listing published in accordance with paragraph (b) of S4.1.1.

S4.2. Information contained in a publication specified in S4.1.1(b) that lists general categories of tires and rims by size designation, type of construction, and/or intended use, is considered to be manufacturer's information required by S4.1 for the listed tires, unless the publication itself or specific information provided according to S4.1(a) indicates otherwise.

S5. *General requirements.* [Reserved]

S5.5 *Tire Markings.* Except as specified in paragraphs (a) through (h) of S5.5, each tire must be marked on each sidewall with the information specified in S5.5 (a) through (d) and on one sidewall with the information specified in S5.5 (e) through (h) according to the phase-in schedule specified in S7 of this standard. The markings must be placed between the maximum section width and the bead on at least one sidewall, unless the maximum section width of the tire is located in an area that 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, those markings must 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 must be in letters and numerals not less than 0.078 inches high and raised above or sunk below the tire surface not less than 0.015 inch. The tire identification and DOT symbol labeling must comply with part 574 of this chapter.

(a) The symbol DOT, which constitutes a certification that the tire conforms to applicable Federal motor vehicle safety standards;

(b) The tire size designation as listed in the documents and publications specified in S4.1.1;

(c) The maximum permissible inflation pressure, subject to the limitations of S5.5.4 through S5.5.6;

(d) The maximum load rating;

(e) The generic name of each cord material used in the plies (both sidewall and tread area) of the tire;

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

(g) The term ''tubeless'' or ''tube type,'' as applicable; and

(h) The word ''radial,'' if the tire is a radial ply tire.

S5.5.1 Each tire must be labeled with the tire identification number required by 49 CFR part 574 on the intended outboard sidewall of the tire. Either the tire identification number or a partial tire identification number, containing all characters in the tire identification number, except for the date code, must be labeled on the other sidewall of the tire. If a tire does not have an intended outboard sidewall, the tire must be labeled with the tire identification number required by 49 CFR part 574 on one sidewall and with either the tire identification number or a partial tire identification number, containing all characters in the tire identification number except for the date code, on the other sidewall.

S5.5.2 [Reserved]

S5.5.3 Each tire must be labeled with the name of the manufacturer, or brand name and number assigned to the manufacturer in the manner specified in 49 CFR part 574.

S5.5.4 If the maximum inflation pressure of a tire is 240, 280, 290, 300, 330, 340, 350 or 390 kPa, then:

(a) Each marking of that inflation pressure pursuant to S5.5(c) must be followed in parenthesis by the equivalent psi, rounded to the next higher whole number; and

(b) Each marking of the tire's maximum load rating pursuant to S5.5(d) in kilograms must be followed in parenthesis by the equivalent load rating in pounds, rounded to the nearest whole number.

S5.5.5 If the maximum inflation pressure of a tire is 420 kPa (60 psi), the tire must have permanently molded into or onto both sidewalls, in letters and numerals not less than ½ inch high, the words ''Inflate to 60 psi'' or ''Inflate to 420 kPa (60 psi).'' On both sidewalls, the words must be positioned in an area between the tire shoulder and the bead of the tire. However, the words must be also positioned on the tire so that they are not obstructed by the flange of any rim designated for use with that tire in this standard or in Standard No. 110 (§ 571.110 of this part).

S5.5.6 For LT tires, the maximum permissible inflation pressure shown must be the inflation pressure that corresponds to the maximum load of the tire for the tire size as specified in one of the publications described in S4.1.1.(b) of § 571.139. At the manufacturer's option, the shown inflation pressure may be as much as 10 psi (69 kPa) greater than the inflation pressure corresponding to the specified maximum load.

S6. *Test procedures, conditions and performance requirements.* [Reserved]

S7. *Phase-in schedule for tire markings.*

S7.1 *Tires manufactured on or after September 1, 2004 and before September 1, 2005.* For tires manufactured on or after September 1, 2004 and before September 1, 2005, the number of tires complying with S4 and S5.5 of this standard must be equal to not less than 40% of the manufacturer's production during that period.

S7.2 *Tires manufactured on or after September 1, 2005 and before September 1, 2006.* For tires manufactured on or after September 1, 2005 and before September 1, 2006, the number of tires complying with S4 and S5.5 of this standard must be equal to not less than 70% of the manufacturer's production during that period.

S7.3 *Tires manufactured on or after September 1, 2006.* Each tire must comply with S6.3 of this standard.

PART 574—TIRE IDENTIFICATION AND RECORDKEEPING

10. The authority citation for 49 CFR part 574 continues to read as follows:

Authority: 15 U.S.C. 1392, 1401, 1403, 1407, 1411–1420, 1421; delegation of authority at CFR 1.50.

11. Section 574.5 is amended by revising paragraph (d), and Figures 1 and 2 to read as follows:

§ 574.5 Tire identification requirements.

* * * * *

(d) *Fourth grouping.* For tires produced or retreaded according to the phase-in schedules specified in S7 of §§ 571.117, 571.129, 571.139 of this chapter, the fourth grouping, consisting of four numerical symbols, must identify the week and year of manufacture. The first two symbols must identify the week of the year by using ''01'' for the first full calendar week in each year, ''02'' for the second full calendar week, and so on. The calendar week runs from Sunday through the following Saturday. The final week of each year may include not more than 6 days of the following year. The third and fourth symbols must identify the year. Example: 0101 means the 1st week of 2001, or the week beginning Sunday, January 7, 2001, and ending Saturday, January 13, 2001. The symbols signifying the date of manufacture shall immediately follow the optional descriptive code (paragraph (c) of this section). If no optional descriptive code is used, the symbols signifying the date of manufacture must be placed in the area shown in Figures 1 and 2 of this section for the optional descriptive code.

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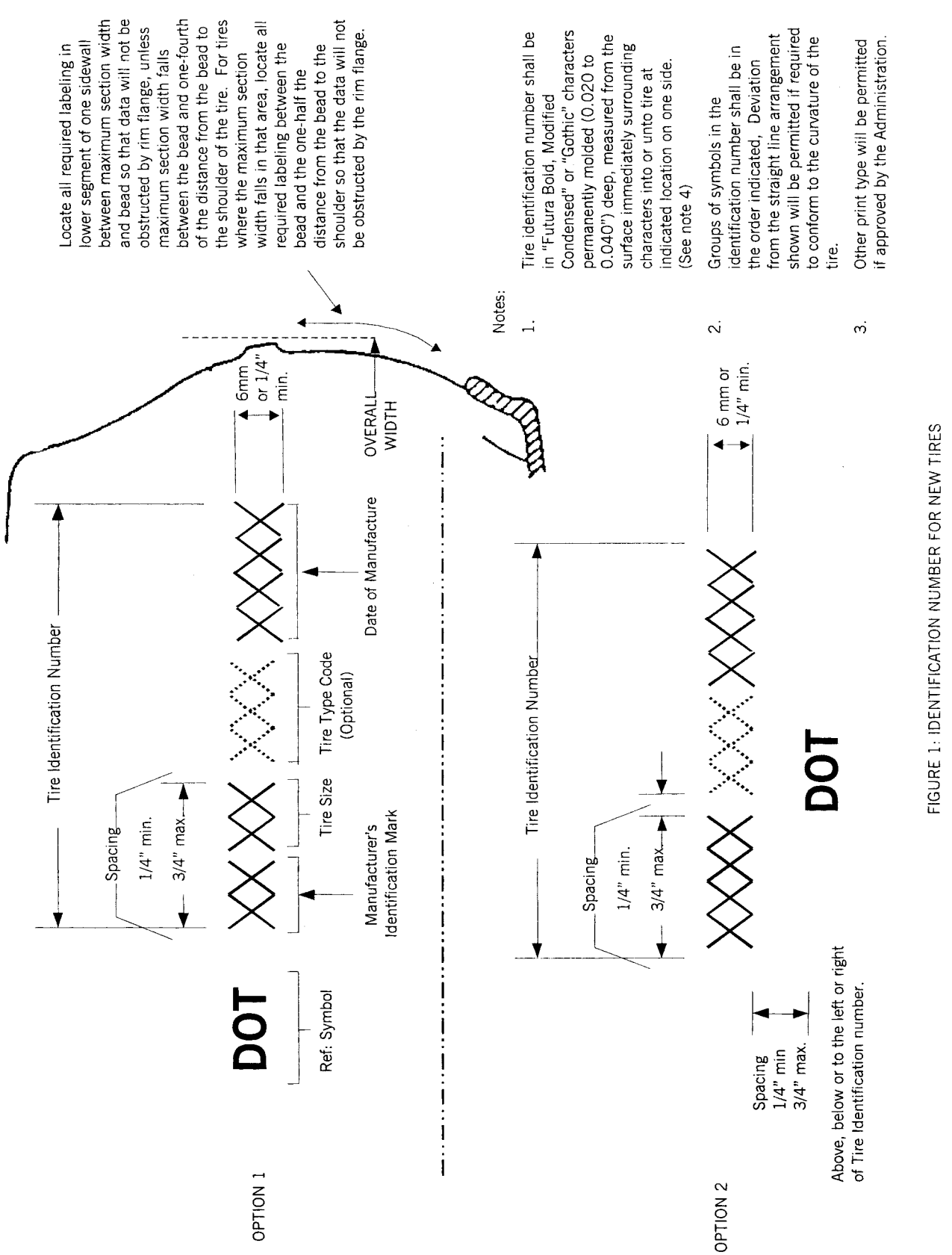

FIGURE 1: IDENTIFICATION NUMBER FOR NEW TIRES

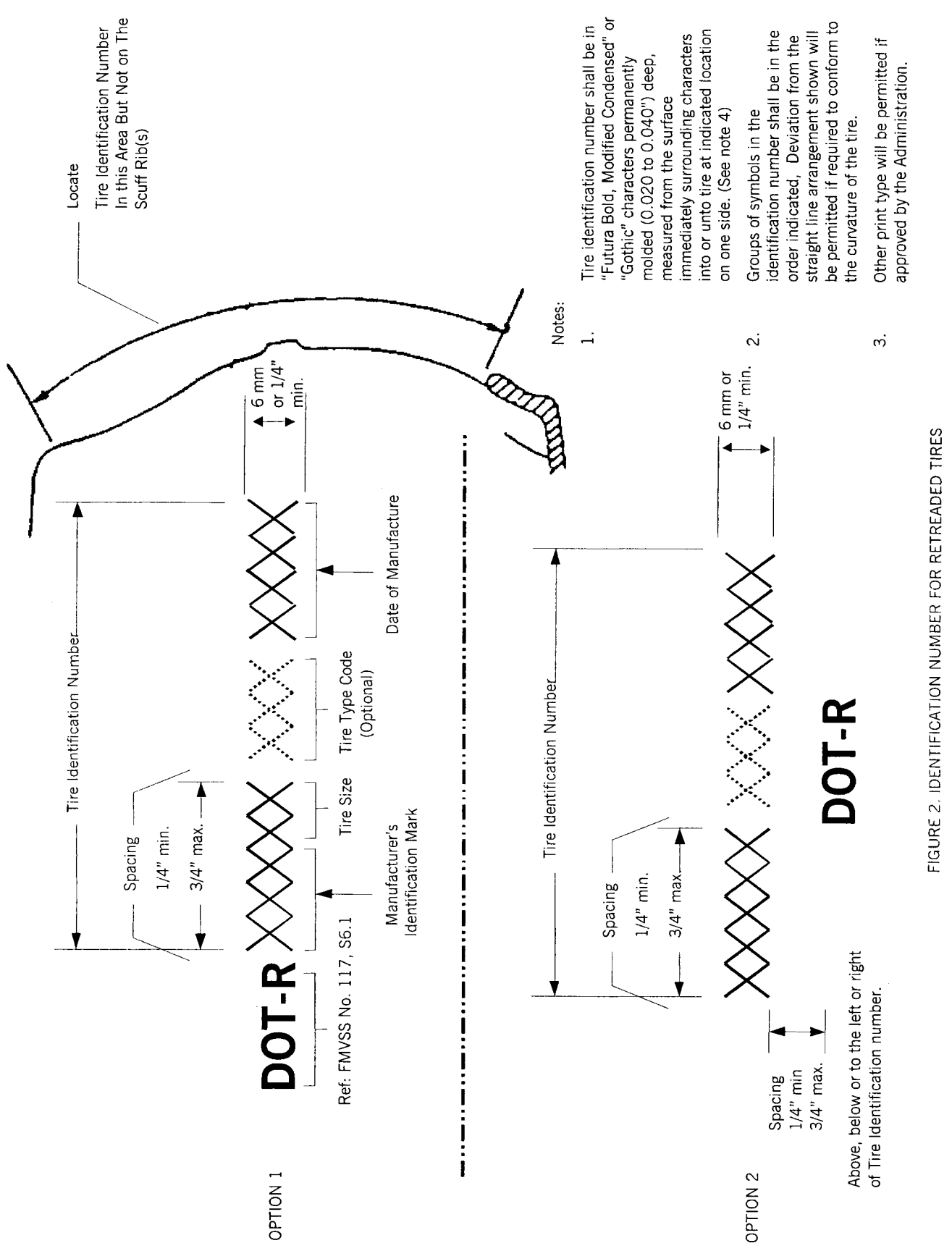

FIGURE 2. IDENTIFICATION NUMBER FOR RETREADED TIRES

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* * * * *

PART 575—CONSUMER INFORMATION REGULATIONS

12. The authority citation for part 575 continues to read as follows:

Authority: 15 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at CFR 1.50.

13. Section 575.6 is amended by adding paragraphs (a)(4) and (a)(5) to read as follows:

§ 575.6 Requirements.

* * * * *

(a) * * *

(4) When a motor vehicle that has a GVWR of 10,000 pounds or less, except a motorcycle or low speed vehicle, and that is manufactured on or after September 1, 2003, is delivered to the first purchaser for purposes other than resale, the manufacturer shall provide to the purchaser, in writing in the English language and not less than 10 point type, a discussion of the items specified in paragraphs (a)(4) (i) through (v) of this section in the owner's manual, or, if there is no owner's manual, in a document.

(i) Tire labeling, including a description and explanation of each marking on the tires provided with the vehicle, and information about the location of the Tire Identification Number (TIN);

(ii) Recommended tire inflation pressure, including a description and explanation of:

(A) Recommended cold tire inflation pressure,

(B) The vehicle placard and tire inflation pressure label specified in Federal Motor Vehicle Safety Standard No. 110 and their location in the vehicle,

(C) Adverse safety consequences of underinflation (including tire failure), and

(D) Measuring and adjusting air pressure to achieve proper inflation;

(iii) Glossary of tire terminology, including ''cold tire pressure,'' ''maximum inflation pressure,'' and ''recommended inflation pressure,'' and all non-technical terms defined in S3 of FMVSS Nos. 110 & 139;

(iv) Tire care, including maintenance and safety practices;

(v) Vehicle load limits, including a description and explanation of:

(A) Locating and understanding load limit information, total load capacity, seating capacity, towing capacity, and cargo capacity,

(B) Calculating total and cargo load capacities with varying seating configurations including quantitative examples showing/illustrating how the vehicle's cargo and luggage capacity decreases as the combined number and size of occupants increases,

(C) Determining compatibility of tire and vehicle load capabilities,

(D) Adverse safety consequences of overloading on handling and stopping and on tires.

(5) When a motor vehicle that has a GVWR of 10,000 pounds or less, except a motorcycle or low speed vehicle, and that is manufactured on or after September 1, 2003, is delivered to the first purchaser for purposes other than resale, the manufacturer shall provide to the purchaser, in writing in the English language and not less than 10 point type, the following verbatim statement in the owner's manual, or, if there is no owner's manual, in a document:

Steps for Determining Correct Load Limit—

(*1*) Locate the statement ''The combined weight of occupants and cargo should never exceed XXX pounds'' on your vehicle's placard.

(*2*) Determine the combined weight of the driver and passengers that will be riding in your vehicle.

(*3*) Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.

(*4*) The resulting figure equals the available amount of cargo and luggage load capacity. For example, if the ''XXX'' amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage load capacity is 650 lbs. (1400 − 750 (5 × 150) = 650 lbs.)

(*5*) Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity calculated in Step 4.

(*6*) If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult this manual to determine how this reduces the available cargo and luggage load capacity of your vehicle.

14. Part 597 is added to read as follows:

PART 597—TIRES FOR MOTOR VEHICLES WITH A GVWR OF 10,000 POUNDS OR LESS PHASE-IN REPORTING REQUIREMENTS

Sec.

Authority: 49 U.S.C. 322, 30111, 30115, 30117, and 30166; delegation of authority at 49 CFR 1.50.

§ 597.1 Scope.

This part establishes requirements for manufacturers of new pneumatic tires for motor vehicles with a gross vehicle weight rating of 10,000 pounds or less to submit reports, and maintain records related to the reports, concerning the number of such tires that meet the requirements of Standard No. 139, *New Pneumatic Tires for Light Vehicles* (49 CFR 571.139).

§ 597.2 Purpose.

The purpose of these reporting requirements in this part is to assist the National Highway Traffic Safety Administration in determining whether a manufacturer has complied with Standard No. 139 (49 CFR 571.139).

§ 597.3 Applicability.

This part applies to manufacturers of tires for motor vehicles with a gross vehicle weight rating of 10,000 pounds or less.

§ 597.4 Definitions.

(a) All terms defined in 49 U.S.C. 30102 are used in their statutory meaning.

(b) ''Motor vehicle'' and ''gross vehicle weight rating'' are used as defined in 49 CFR 571.3.

(c) ''Production year'' means the 12-month period between September 1 of one year and August 31 of the following year, inclusive.

§ 597.5 Response to inquiries.

Each manufacturer shall, upon request from the Office of Vehicle Safety Compliance, provide information identifying the tires (by make, model, brand and tire identification number) that have been certified as complying with Standard No. 139 (49 CFR 571.139). The manufacturer's designation of a tire as a certified tire is irrevocable.

§ 597.6 Reporting requirements.

(a) *General reporting requirements.* Within 60 days after the end of the production years ending August 31, 2005 and August 31, 2006, each manufacturer shall submit a report to the National Highway Traffic Safety Administration concerning its compliance with Standard No. 139 (49 CFR 571.139) for its tires produced in that year for motor vehicles with a GVWR of 10,000 pounds or less. Each report shall—

(1) Identify the manufacturer;

(2) State the full name, title, and address of the official responsible for preparing the report;

(3) Identify the production year being reported on;

(4) Contain a statement regarding whether or not the manufacturer complied with Standard No. 139 (49 CFR 571.139) for the period covered by the report and the basis for that statement;

(5) Provide the information specified in paragraph (b) of this section;

(6) Be written in the English language; and

(7) Be submitted to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590.

(b) *Report Content*—(1) *Basis for phase-in production goals.* Each manufacturer shall provide the number of tires for motor vehicles with a gross vehicle weight rating of 10,000 pounds or less manufactured for sale in the United States for each of the three previous production years, or, at the manufacturer's option, for the production year for which the report is filed. A new manufacturer that has not previously manufactured these tires for sale in the United States shall report the number of such tires manufactured during the current production year.

(2) *Production.* Each manufacturer shall report for the production year for which the report is filed: the number of new pneumatic tires for motor vehicles with a GVWR of 10,000 pounds or less that meet Standard No. 139 (49 CFR 571.139).

§ 597.7 Records.

Each manufacturer must maintain records of the tire identification number for each tire for which information is reported under 49 CFR 590.6(b)(2) until December 31, 2007.

§ 597.8 Petition to extend period to file report.

A manufacturer may petition for extension of time to submit a report under this part. A petition will be granted only if the petitioner shows good cause for the extension and if the extension is consistent with the public interest. The petition must be received not later than 15 days before expiration of the time stated in § 597.6(a). The filing of a petition does not automatically extend the time for filing a report. The petition must be submitted to: Administrator, National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC 20590.

Issued: November 6, 2002.

Jeffrey W. Runge,

Administrator.

[FR Doc. 02–28682 Filed 11–15–02; 8:45 am]

BILLING CODE 4910–59–P