

are being phased in during two stages, the first of which extends from September 1, 2003, to August 31, 2006. In September 2002, in response to petitions for rulemaking, we published a notice of proposed rulemaking (NPRM) to reduce the percentage of vehicles that must comply with the advanced air bag requirements during the first year of the first stage, *i.e.*, from September 1, 2003, through August 31, 2004, from 35 percent to 20 percent. This final rule adopts that proposed change, which reflects the technical challenges being faced by the vehicle manufacturers in meeting the new requirements and the fact that two of the automotive suppliers dropped plans to offer devices that suppress the passenger air bag when a child is present. In the NPRM, we also requested comments on possible adjustments in the alternative phase-in requirement available to limited line manufacturers. We plan to address that issue in a separate document, in the near future.

DATES: *Effective Date:* The amendments made in this rule are effective March 3, 2003.

Petitions: Petitions for reconsideration must be received by March 17, 2003.

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

FOR FURTHER INFORMATION CONTACT: The following persons at the National Highway Traffic Safety Administration, 400 Seventh Street, SW., Washington, DC, 20590:

For technical issues: Mr. Louis Molino, Office of Crashworthiness Standards, NVS-112, telephone (202) 366-2264, facsimile (202) 493-2739.

For legal issues: Mr. Edward Glancy, Office of the Chief Counsel, NCC-112, telephone (202) 366-2992, facsimile (202) 366-3820.

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I. Background

A. The Advanced Air Bag Final Rule

On May 12, 2000, we published in the **Federal Register** (65 FR 30680) a rule to require advanced air bags. (Docket No. NHTSA 00-7013; Notice 1.) The rule

amended Standard No. 208, *Occupant Crash Protection*, to require that future air bags be designed so that, compared to current air bags, they create less risk of serious air bag-induced injuries, particularly for small women and young children, and provide improved frontal crash protection for all occupants, by means that include advanced air bag technology.

The rule will be phased in during two stages. The first stage phase-in will improve protection by requiring vehicles to be certified as passing the unbelted test requirements¹ for both the 5th percentile adult female and 50th percentile adult male dummies in a 32–40 km/h (20–25 mph) rigid barrier crash, and belted test requirements² for the same two dummies in a rigid barrier crash with a maximum test speed of 48 km/h (30 mph). In addition, the first stage will minimize the risk of injury from air bags by requiring vehicles to include technologies that will minimize the risk of air bag-induced injuries for young children and small adults.

During the first stage phase-in, from September 1, 2003, to August 31, 2006, increasing percentages of motor vehicles will be required to meet requirements for minimizing air bag risks,³ primarily by either automatically turning off the air bag when young children are present or deploying the air bag more benignly so that it is much less likely to cause serious or fatal injury to out-of-position occupants.⁴ If they so wish, manufacturers may choose to use a combination of those approaches.

Manufacturers that decide to design their passenger air bags to turn off will use weight sensors and/or other means of detecting the presence of young children. To test the ability of those means to detect the presence of children, the rule specifies that child dummies be placed in child seats that are, in turn, placed on the passenger seat in both proper and (to simulate misuse) improper ways. It also specifies tests that are conducted with unrestrained child dummies sitting,

kneeling, standing, or lying on the passenger seat.

The ability of air bags to deploy in a low-risk manner will be tested using child dummies on the passenger side and the small adult female dummy on the driver side. For manufacturers that decide to design their passenger air bags to deploy in a low risk manner, the rule specifies that unbelted child dummies be placed against the instrument panel in two different positions. The air bag is then deployed with the dummies in each position. This placement was specified because pre-crash braking can cause unrestrained children to move forward into or near the instrument panel before the air bag deploys. The ability of driver air bags to deploy in a low risk manner will be tested by placing the 5th percentile adult female dummy against the steering wheel in two different positions and then deploying the air bag with the dummy in each position.

The second stage phase-in will require vehicles to be certified as passing the belted test requirements for the 50th percentile adult male dummy at a test speed up to 56 km/h (35 mph). This requirement will provide improved protection for belted occupants.

B. September 2002 Proposal To Adjust Phase-in

On September 24, 2002, we published in the **Federal Register** (67 FR 59800) a document responding to petitions for rulemaking from the Alliance of Automobile Manufacturers, Toyota, and DaimlerChrysler requesting changes in the advanced air bag final rule. (Docket No. NHTSA 02-13393; Notice 1.)

In response to the petitions, we proposed to reduce the percentage of vehicles that must comply with the advanced air bag requirements during the first year of the phase-in, *i.e.*, from September 1, 2003, through August 31, 2004, from 35 percent to 20 percent. We stated that the proposed change reflected the technical challenges being faced by the vehicle manufacturers in meeting the new requirements and the fact that two of the automotive suppliers had dropped plans to offer devices that suppress the passenger air bag when a child is present. We also stated that we had tentatively concluded that a reduction in the first year's phase-in requirement from 35 percent to 20 percent strikes a reasonable balance between ensuring that the industry provides advanced air bags as quickly as is reasonably possible, while avoiding a situation in which the industry must put new technologies into vehicles before they have been fully tested.

¹ "Unbelted test requirements" are requirements that specify the use of unbelted dummies in testing vehicles.

² "Belted test requirements" are requirements that specify the use of belted dummies in testing vehicles.

³ The complete phase-in schedule was: 9/1/03 to 8/31/04—35 percent; 9/1/04 to 8/31/05—65 percent; 9/1/05 to 8/31/06—100 percent (manufacturers may use credits for early compliance); 9/1/06—all vehicles must comply (no use of credits).

⁴ The rule also establishes very general performance requirements for dynamic automatic suppression systems (DASS) and a special expedited petitioning and rulemaking process for considering procedures for testing advanced air bag systems incorporating a DASS.