

only when a change to a CRS would affect vehicle certification is not practical from either a regulatory or manufacturing perspective. The agency's knowledge of particular suppression systems, typically, is not sufficient to allow us to make such determinations. Likewise, limiting changes to the appendix based on whether a CRS would affect vehicle certification could result in manufacturers designing systems that only test obsolete restraints. While such a scenario may not prove particularly problematic from a compliance perspective, it could prove quite risky in the real world. The intent of requiring automatic suppression systems to detect the presence of CRSs that are on the market is to ensure that the systems actually work in the real world. If a change to a CRS were clearly cosmetic, such as color scheme or upholstery, the list would not be affected.

We continue to believe that the CRS surrogates under development by UMTRI are insufficiently representative of the CRS market to adopt at this time. The surrogates do not attempt to represent dimensional outliers. As such, they cannot ensure the robustness of an automatic suppression system under real world conditions. Additionally, without amending FMVSS No. 213 to require restraints to be dimensionally similar to the surrogates, there is no assurance that the surrogates will continue to represent even the average dimensions of restraints on the market. We have already determined that it is inappropriate to amend FMVSS No. 213 to accommodate the requirements of FMVSS No. 208.

We recognize that Appendix A is not perfect. Indeed, regularly updating the appendix is a significant amount of work for the agency. Nevertheless, at this time there is no alternative that will test whether automatic suppression systems are capable of recognizing those child restraints that are likely to be used by the owners of vehicles with advanced air bags.

We do find that the industry request that we identify specific CRS production dates has merit. This will allow for a more precise identification of which CRSs may be used in compliance testing. However, in future amendments, Appendix A will, as a general matter, only include the production start dates, since the agency is in no position to know, beforehand, when a restraint manufacturer will cease production of a particular model. The fact that a particular restraint may not be produced for the entire time that it is included in Appendix A underscores the need for vehicle

manufacturers to procure all restraints in the appendix promptly after the revised appendix is published. The agency may specify a production end date in an amendment to the appendix if a CRS undergoes a significant change without a change in the name and model number and the agency wishes to keep the older version on the list.

Beginning in September 2000, vehicle manufacturers were required to begin a phase-in of vehicles with child restraint anchorage systems, consisting of a tether anchorage and two lower anchorages. (See FMVSS No. 225.) CRS manufacturers began selling CRSs with LATCH to utilize these vehicle anchorages, and as of September 1, 2002, all CRSs must have LATCH. As noted by Evenflo, all child restraints currently manufactured, other than booster seats, harnesses, and the car bed, are required to have LATCH. Accordingly, the agency believes it is imperative to add some LATCH seats to the appendix and to have them tested in the next model year. When the amendments made to Appendix A in this document are effective, September 1, 2004, CRSs with LATCH will have been required for almost two years. To reflect this change in the market, two new LATCH CRSs are included in the amended Appendix A. We have decided against replacing all of the seats other than booster seats and the car bed with new LATCH seats because to do so would dramatically amend the appendix and would fail to account for those non-LATCH seats still widely in use. As subsequent amendments are made to the appendix, these older seats will be replaced to account for their decreased presence in vehicles.

In a related issue, we note that many child restraint manufacturers place an expiration date, typically six years, on their seats. Given the intent of child restraint manufacturers that the restraints not be used after their expiration date, this information will also be considered by the agency in Appendix A amendment proposals.

Appendix A requires that vehicles certified to FMVSS No. 208 S19, S21, or S23 and produced between December 18, 2001 and September 1, 2004 may be tested with one car bed, ten rear facing child restraints, seven forward facing child restraints, and four booster seats for a possible 22 child restraints. All of the child restraints used in testing must be manufactured after December 1, 1999.

As of September 1, 2004, three of the rear facing child restraints will not be used in testing (designated by "Terminated"), while two additional forward facing child restraints are added

to the list (designated by "Effective"). Thus, for vehicles produced as of September 1, 2004, up to 21 child restraints may be used in testing.

D. Neck and Chest Injury Criteria

DaimlerChrysler petitioned the agency to use neck injury criteria (Nij) only in static out-of-position tests and not in belted and unbelted in-position tests. DaimlerChrysler also petitioned the agency to use a threshold of 73 g for the 5th percentile adult female test dummy chest acceleration.

In comments to the SNPRM (NHTSA-1999-6407-44) and in a petition for reconsideration on the Advanced Air Bag Rule (NHTSA-2000-7013-022), DaimlerChrysler asked for this change to the chest acceleration performance limit as well as expressed a desire for the elimination of Nij from the regulation.

In the December 2001 final rule, we denied both of DaimlerChrysler's petitions. In denying the petition for a 73 g threshold, the agency relied on crash tests in which the lower thorax/abdomen of the 5th percentile adult female test dummy contacted the steering wheel rim, producing high chest g measurements and low chest deflection. Chest deflection, measured only at the central upper thorax, and chest acceleration with a performance limit of 73 g would not identify these cases of steering wheel rim contact as injurious, whereas a performance limit of 60 g would. See 66 FR 65376, 65398. The agency also determined that the Nij formula incorporates the relevant measurements for evaluating neck injury during frontal impact and that much of the automotive industry has accepted Nij as a valid injury measurement. See 66 FR 65376, 65399.

DaimlerChrysler has not provided any new information with respect to these two issues in its current petition for reconsideration. The agency still concurs with our previous determination and therefore is denying DaimlerChrysler's petition with respect to the chest g and Nij measurements.

E. Technical Corrections of the Regulatory Text

S14.3(a) contains a typographical error which is corrected in this document. As correctly identified in the heading, this section applies to vehicles manufactured on or after September 1, 2007 and before September 1, 2010. The regulatory text incorrectly states that it applies to vehicles manufactured on or before September 1, 2007 and before September 1, 2010. This error has been corrected.

In the December 18, 2001 final rule the reference to "Plane A" in S20.2.1.2