

further proposed a minimum unbelted test speed of 29 km/h (18 mph) and stated we were considering a maximum unbelted test speed of between 40 and 48 km/h (25 and 30 mph). In DaimlerChrysler's comments to the SNPRM, it requested that the only unbelted test speed should be 40 km/h (25 mph). It further commented that the indicant test should be at a speed of 24 km/h (15 mph) so that a 16 km/h (10 mph) "gray zone" would exist between the two tests. DaimlerChrysler and other commenters stated that there was a conflict between meeting the low risk requirements and meeting the unbelted rigid barrier test with the 50th percentile adult male test dummies.

Air bags designed to vary their performance in response to sensed differences in crash severity or other conditions have a range of conditions in which the air bag changes from one level of performance to another; *i.e.* "gray zones." At very low speeds, there may be uncertainty within a gray zone about whether the air bag will deploy or not deploy, and at higher speeds, there will be uncertainty about which level of performance will be triggered. Manufacturers stated that in many cases a first stage air bag that would not harm children would not be sufficient to satisfy the injury criteria performance limits for the 50th percentile adult male test dummy in a test at 40 km/h (25 mph) and may be insufficient to certify compliance in a 29 km/h (18 mph) test. In response to DaimlerChrysler and other commenters, the Advanced Air Bag Rule reduced the indicant test speed to 26 km/h (16 mph) and selected a speed range for the unbelted test of 32–40 km/h (20–25 mph). In the preamble to the Advanced Air Bag Rule we stated that we believed the speed difference (6 km/h gray zone) should be sufficient to resolve manufacturers' concerns.

In DaimlerChrysler's petition for reconsideration to the Advanced Air Bag Rule, it once again requested additional separation between the indicant and low risk deployment tests. On this occasion the request was reduced to 14 km/h (9 mph) of separation. The basis for its request was the same as when it commented on the SNPRM. In the preamble of the December 18, 2001 final rule, the agency stated that DaimlerChrysler was basically arguing again for an unbelted test speed of 40 km/h (25 mph) and denied the petition. However the December 2001 final rule did limit the test dummy size for the indicant test on the passenger side to the 5th percentile adult female test dummy. We stated:

Thus, if a vehicle manufacturer faces a situation where deployment of both stages of a dual stage air bag is necessary to meet the unbelted barrier test requirements for 50th percentile adult male dummies in a 32 km/h (20 mph) crash test, and, because of gray zone issues, it is possible that both stages may fire in a 26 km/h (16 mph) crash, the manufacturer can design its air bag system, using occupant recognition technology, so that only the first stage will fire in the presence of 5th percentile adult female dummies in crash tests at these severity levels. (66 FR 65376, 65384.)

In DaimlerChrysler's petition for reconsideration to the December 2001 final rule, it again requested additional test speed separation and repeated its desire for a 14 km/h (9mph) separation. It also stated that the agency misinterpreted DaimlerChrysler's petition to the Advanced Air Bag Rule, in that an unbelted test speed of 40 km/h (25 mph) was only one potential result of a 14 km/h (9mph) test speed separation. It gave the example of conducting the low risk deployment indicant test at 23 km/h (14 mph) with a minimum test speed for the unbelted test of 37 km/h (23 mph). It further stated that using the 5th percentile adult female test dummy in the indicant test provides no relief because the problem at hand is one of crash severity sensing and not occupant classification.

The agency may have provided a single interpretation of DaimlerChrysler's previous petition for a 14 km/h (9 mph) separation request by viewing it as a request for a 40 km/h (25 mph) unbelted test. But given an unbelted test of 40 km/h (25 mph), any other interpretation that keeps the minimum unbelted test below 40 km/h (25 mph) would result in a low risk deployment indicant test speed of less than 26 km/h (16 mph).

The NPRM for the Advanced Air Bag Rule (63 FR 49958; September 18, 1998) proposed 32 km/h (20 mph) as the impact speed for the low risk deployment indicant test. The SNPRM proposed 29 km/h (18 mph) and the Advanced Air Bag Rule required 26 km/h (16 mph) for the low risk deployment indicant test. Any further reduction in the indicant test speed may result in a further reduction in the benefits to children and adults who happen to be out-of-position in a crash above this threshold speed. This reduction may create the situation where no bag deploys during the indicant test.

DaimlerChrysler's petition provides no new information and makes no new arguments related to the issue of an appropriate "gray zone" separating the low risk deployment indicant test and the unbelted test. Therefore, DaimlerChrysler's petition is denied.

B. Test Procedures for Automatic Suppression Requirements (Belt Cinching)

In compliance testing for the automatic suppression features with CRSs under S20.2, S22.2, and S24.2, the belted tests require the seat belt to be cinched down at 134 N (30 lb) as measured at the outboard section of the lap belt. Some manufacturers place a button (latchplate button) on belts, which can prevent the belt from being cinched down to the required level. These buttons are placed on belts to keep the buckle from sliding down on the unsecured belt, ensuring that the latchplate remains accessible by restricting the movement of the latchplate on the seat belt. In the December 2001 final rule, we stated that:

While we are not adding a provision to the regulatory text, we do intend to remove the plastic button if it prevents us from reaching a 134 N (30 lbf) force. This button is not required under any Federal motor vehicle safety standards. (66 FR 65376, 65389.)

DaimlerChrysler petitioned the agency to require that no compliance test procedure detailed in S20.2, S22.2, or S24.2 allow the removal of latchplate buttons. DaimlerChrysler claimed that this button is necessary to meet the requirement of S7.4.4, *Latchplate access*, of FMVSS No. 208, and that testing requiring the removal of the button "may force manufacturers to certify to a non-saleable condition."

DaimlerChrysler's petition with regard to the latchplate button is denied. It is critical to achieve the cinch down load of 134 N (30 lbf) in order to test the suppression systems in what we have found to be a real world configuration. Keeping the latchplate button (or webbing loop in the case of GM vehicles) will, in some instances, not allow this force to be achieved. However, for many vehicles the button is not a problem. Removing the button to allow achievement of the required cinch down load allows for the agency to have a more objective requirement.

Further, removal of the button for suppression testing does not result in vehicle certification in a "non-saleable condition." Many other test procedures in the FMVSSs require modifications to the vehicle as a specific aspect of performance. For example, FMVSS No. 207, *Seating systems*, requires bracing to be added between the seat base and seat back before pulling on the seat to test the strength of the seat anchorage to the vehicle. The cinch force required for the suppression test is to test a "worst case scenario," and removal of the latchplate button simply allows the belt to be