

specified in the rule (*i.e.*, for a 15,000 N strength requirement for tether anchorages (S6.3 and S8.1) and a 11,000 N strength requirement for the lower LATCH anchorages (S9.4.1(a)). They indicated that they could provide tether and lower anchorages meeting less-stringent Canadian requirements for the tether anchorage and less-stringent requirements for lower anchorages set forth in a draft standard being developed by a working group of the International Organization for standardization (ISO), by the compliance dates set forth in the March 1999 final rule, but they could not provide tether and lower anchorages meeting the more-stringent strength requirements established in that rule by those dates. The Alliance suggested that the agency either delay the effective date of the rule or adopt the Canadian requirements for the tether anchorage and the draft ISO requirements for the lower anchorages.

2. August 1999 Response To Petitions

In response to concerns of several of the petitioners about the lead-time for and the stringency of the anchorage strength and other requirements in the March 1999 final rule, NHTSA published a final rule on August 31, 1999 (64 FR 47566, docket 99-6160). Among other things, the August 1999 rule permitted vehicle manufacturers to meet alternative requirements during an initial several year period. Until September 1, 2001, manufacturers were permitted to meet either the requirements in the March 1999 final rule or the less-stringent Canadian requirements for tether anchorages. Until September 1, 2002, manufacturers were permitted to meet the requirements for the lower anchorages consistent with those set forth in the draft ISO standard.

NHTSA balanced the benefits associated with vehicle manufacturers providing the new tether and lower anchorages, albeit ones meeting the less-stringent Canadian and draft ISO requirements, in accordance with the original schedule against the possible consequences of not providing for that alternative means of compliance. We concluded that, on balance, safety would be best served if the Canadian and draft ISO requirements were allowed as a compliance option for an interim period. We determined that the early availability of tether anchorages, even ones meeting the Canadian requirements, would promote safety by increasing the likelihood that parents will attach a top tether on a child restraint system. Compared to an untethered child restraint, a tethered

child restraint offers improved protection against head impact in a crash. A tether anchorage that complies with the Canadian strength requirement will offer a level of safety that is significantly better than the one that would exist with no tether anchorage at all. We similarly concluded that lower anchorages meeting the draft ISO requirements would provide safety benefits for parents who have difficulty attaching a child restraint correctly in a vehicle or whose vehicle seats are incompatible with child restraints. Thus, the agency's adoption of these interim compliance alternatives made it possible to begin reaping the benefits of LATCH systems sooner than would have been possible under the March 1999 final rule.

The August 1999 final rule also responded to other issues. With regard to some issues, such as some of the technical ones addressing specifics on how an anchorage is to be tested and limiting the information that manufacturers have to provide in vehicle owners manuals on LATCH systems, the agency granted requests to amend the March 1999 rule. For some of the other issues, the agency denied or partially granted the petitions for reconsideration, which prompted the Alliance, Ford, Volkswagen, and Keiper GmbH & Co. (Keiper) to petition the agency to reconsider the decisions based on new information.

3. July 2000 Response to Petitions

On July 31, 2000 (65 FR 46628, docket 7648), NHTSA published a final rule that extended, until August 31, 2004, the period during which vehicle manufacturers may meet the Canadian and draft ISO requirements. The final rule also addressed other issues concerning the installation of child restraint anchorage systems in vehicles and how those systems are tested in the agency's compliance tests. Those issues involved the configuration requirements for the bars set forth in the ISO provisions of S15 of Standard No. 225; how the agency determines the H-point of a seating position when evaluating whether a tether anchorage is properly located in a seating position; what the dimensions of the child restraint fixture ("CRF") should be; and the applicability of the standard to small manufacturers, to manufacturers of vehicles that cannot meet the pitch, roll and yaw requirements with the child restraint fixture installed, and to manufacturers of vehicles temporarily excepted from the requirement of FMVSS No. 208, "Occupant Crash Protection," to provide an air bag at the front passenger seating position.

II. The Remaining Issues

The remainder of this document addresses the remaining issues that were raised in petitions for reconsideration of the aforementioned final rules.

a. Installation of Anchorage Systems (S4)

1. Number of Tether Anchorages and Where They Should Be Located

i. Number of Tether Anchorages. The March 1999 final rule required that vehicles with three or more rear designated seating positions must have tether anchorages at not less than three positions in these vehicles. This requirement applied to passenger cars, as well as to multipurpose passenger vehicles ("MPVs").³ NHTSA required the third tether anchorage to improve the means of attaching child restraints at a center rear seating position. 64 FR at 10803. Because Standard No. 225 requires that the lower anchorages of a LATCH system be 280 mm apart, most vehicles do not have a rear seat that is wide enough to accommodate anchorages in the center seating position and in an adjacent outboard position. Accordingly, manufacturers will probably install LATCH systems in the two outboard seating positions, and not in a center and an outboard position. However, many parents prefer placing child restraints in a center rear seating position, believing, correctly, that such a position is generally safer for a child, particularly with respect to the risk of injury if the child were in an outboard position on the side that was struck in a side impact.⁴ A child restraint installed properly in a center seating position and using the vehicle's belt system and a top tether will perform comparably to a child restraint installed using the three-point LATCH system. The tether anchorage in both systems provides safety benefits to the child. Thus, the requirement for the third tether anchorage improves the position that many parents will want to use for their child (the center seating position).

Some manufacturers objected to the requirement for a third tether anchorage in MPVs with five or fewer designated seating positions. (For convenience,

³ A Multipurpose passenger vehicle" is defined in 49 CFR § 571.3 as Aa motor vehicle with motive power, except a low-speed vehicle or trailer, designed to carry 10 persons or less which is constructed either on a truck chassis or with special features for occasional off-road operation."

⁴ It is probably easier for most parents to install two child restraints on a vehicle seat bench if the two LATCH systems were on the outboard positions than if they were side-by-side (in the center position and on an adjacent outboard position).