

3A.1 Definitions

3A.1.1 Child Restraint Anchorage - any anchorage required in accordance with the Design Rule for Child Restraint Anchorages as appropriate to the date of manufacture of the vehicle.

3A.1.2 Forward, Rearward (when referenced to a seat) - the direction relative to that which an occupant faces when seated.

3A.2 Requirements

3A.2.1 General - Except for side facing seats, each occupant seat shall withstand the loads specified in Clauses 3A.2.1.1, 3A.2.1.2 and 3A.2.1.3.

3A.2.1.1 The following loads shall be applied separately.

- (a) Twenty times the weight of the entire seat in a forward longitudinal direction simultaneously with, if the seat belt assembly is directly attached to the seat, the total load imposed on the seat by simultaneous application of loads required for seat belt anchorages as appropriate at the date of manufacture of the vehicle, for all attached seat belt assemblies.
- (b) Twenty times the weight of the entire seat in a forward longitudinal direction simultaneously with, where the child restraint anchorages are located in or on the seat back, or are located in the vehicle body structure more than 100mm below a horizontal plane tangential to the point on the top of the seat back longitudinally forward of the child restraint anchorage, a total load of 3.4 kN for each child restraint anchorage, imposed on the seat by simultaneous application to each anchorage by a flexible connection which passes over the top of the seat back to the anchorage. Each load shall be applied forward of the seat back not more than 5° above or below the horizontal, and not more than 5° to left or right of the longitudinal axis of the vehicle.

3A.2.1.2 A load equal to twenty times the weight of the entire seat shall be applied in a rearward longitudinal direction.

3A.2.1.3 A load equal to a 370 Nm moment about the seating reference point for each occupant position for which the seat is designed shall be applied to the upper cross member in a rearward longitudinal direction.

3A.2.2 The seat adjusters need not be operable after the application of the loads specified in Clauses 3A.2.1.1, 3A.2.1.2 and 3A.2.1.3.

3A.2.3 Folding and Hinged Seats - Except for seats with backs which are adjustable for occupant comfort only, hinged or folding seats or seat backs shall be equipped with a self locking, restraining device and a control for releasing the restraining device.

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3A.2.3.1 Where the seat must hinge or fold to permit access to or egress from another seating position, the release control shall be readily accessible to the occupant of that seat and to the occupant of any seat immediately behind that seat, and shall be constructed to preclude inertial release when loaded longitudinally to twenty times acceleration due to gravity.

3A.2.3.2 The restraining device shall be constructed to preclude inertial release when loaded longitudinally in each direction to twenty times the acceleration due to gravity.

3A.2.3.3 The restraining device shall not release or fail when a forward longitudinal load equal to twenty times the mass of the entire seat back is applied at the centre of gravity of the seat back

3A.3 Test Procedures

3A.3.1 Dynamic or static testing techniques may be used.

3A.3.2 Static Test Conditions

3A.3.2.1 Static testing of seats shall be conducted in accordance with Society of Automotive Engineers Recommended Practice J879b, Motor Vehicle Seating Systems - July 1968, using the values specified in and the procedures applicable to this Rule.

3A.3.2.2 Distributed loads may be replaced by concentrated loads at the loading centroid.

3A.3.2.3 Specified loads shall be sustained for at least one second.

3A.3.2.4 Folding or hinged seats, or seats with backs which are adjustable for passenger comfort only, shall be tested with the seat back at the design back angle.