

to 20.0 degrees as possible while keeping the transverse instrumentation platform of the head as level as possible by adjustments specified in S12.3.2(a)(9).

(1) If the dummy is contacting the vehicle interior after these adjustments, move the seat rearward until there is a maximum of 5 mm (0.2 in) between the contact point of the dummy and the interior of the vehicle or if it has a manual seat adjustment, to the next rearward detent position. If after these adjustments, the dummy contact point is more than 5 mm (0.2 in) from the vehicle interior and the seat is still not in its forwardmost position, move the seat forward until the contact point is 5 mm (0.2 in) or less from the vehicle interior, or if it has a manual seat adjustment, move the seat to the closest detent position without making contact, or until the seat reaches its forwardmost position, whichever occurs first.

(b) *Passenger foot positioning.*

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(3) If either foot does not contact the floor pan, place the foot parallel to the floor pan and place the lower leg as perpendicular to the thigh as possible.

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S12.3.4 *5th percentile female in rear outboard seating positions.*

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(h) *Head leveling.*

(1) Vehicles with fixed seat backs. Adjust the lower neck bracket to level the transverse instrumentation platform angle of the head to within ± 0.5 degrees. If it is not possible to level the transverse instrumentation platform to within ± 0.5 degrees, select the neck bracket adjustment position that minimizes the difference between the transverse instrumentation platform angle and level.

(2) Vehicles with adjustable seat backs. While holding the thighs in place, rotate the seat back forward until the transverse instrumentation platform angle of the head is level to within ± 0.5 degrees, making sure that the pelvis does not interfere with the seat bight. If it is not possible to level the transverse instrumentation platform to within ± 0.5 degrees, select the seat back adjustment position that minimizes the difference between the transverse instrumentation platform angle and level, then adjust the neck bracket to level the transverse instrumentation platform angle to within ± 0.5 degrees if possible. If it is still not possible to level the transverse instrumentation platform to within ± 0.5 degrees, select the neck bracket angle position that minimizes the

difference between the transverse instrumentation platform angle and level.

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§ 571.215 [Reserved]

§ 571.216 **Standard No. 216; Roof crush resistance; Applicable unless a vehicle is certified to § 571.216a.**

S1. *Scope.* This standard establishes strength requirements for the passenger compartment roof.

S2. *Purpose.* The purpose of this standard is to reduce deaths and injuries due to the crushing of the roof into the occupant compartment in rollover crashes.

S3. *Application.* (a) This standard applies to passenger cars, and to multipurpose passenger vehicles, trucks and buses with a GVWR of 2,722 kilograms (6,000 pounds) or less. However, it does not apply to—

(a) School buses;

(b) Vehicles that conform to the rollover test requirements (S5.3) of Standard No. 208 (§ 571.208) by means that require no action by vehicle occupants;

(c) Convertibles, except for optional compliance with the standard as an alternative to the rollover test requirements in S5.3 of Standard No. 208; or

(d) Vehicles certified to comply with § 571.216a.

S4. *Definitions.*

Altered roof means the replacement roof on a motor vehicle whose original roof has been removed, in part or in total, and replaced by a roof that is higher than the original roof. The replacement roof on a motor vehicle whose original roof has been replaced, in whole or in part, by a roof that consists of glazing materials, such as those in T-tops and sunroofs, and is located at the level of the original roof, is not considered to be an altered roof.

Raised roof means, with respect to a roof which includes an area that protrudes above the surrounding exterior roof structure, that protruding area of the roof.

Roof over the front seat area means the portion of the roof, including windshield trim, forward of a transverse vertical plane passing through a point 162 mm rearward of the SgRP of the rearmost front outboard seating position.