

S16.3.3.1.9 For vehicles without adjustable seat backs, adjust the lower neck bracket to level the head as much as possible. For vehicles with adjustable seat backs, while holding the thighs in place, rotate the seat back forward until the transverse instrumentation platform of the head is level to within ± 0.5 degrees, making sure that the pelvis does not interfere with the seat bight. Inspect the abdomen to insure that it is properly installed.

S16.3.3.1.10 If it is not possible to orient the head level within ± 0.5 degrees, minimize the angle.

S16.3.3.1.11 Measure and set the dummy's pelvic angle using the pelvic angle gauge (drawing TE-2504, incorporated by reference in 49 CFR Part 572, Subpart O, of this chapter). The angle shall be set to 20.0 degrees ± 2.5 degrees. If this is not possible, adjust the pelvic angle as close to 20.0 degrees as possible while keeping the transverse instrumentation platform of the head as level as possible, as specified in S16.3.3.1.9 and S16.3.3.1.10.

S16.3.3.1.12 If the dummy is contacting the vehicle interior after these adjustments, using only the control that primarily moves the seat fore and aft, 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 a maximum of 5 mm (0.2 in) from the vehicle interior, or if it has a manual seat adjustment, move the seat to the closest detent position that causes no contact, or until the seat reaches its forwardmost position, whichever occurs first.

S16.3.3.2 *Passenger foot positioning.*

S16.3.3.2.1 Place the passenger's feet flat on the toe board.

S16.3.3.2.2 If the feet cannot be placed flat on the toe board, set them perpendicular to the leg centerlines and place them as far forward as possible with the heels resting on the floor pan. 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.

S16.3.3.3 *Passenger arm/hand positioning.*

S16.3.3.3.1 Place the dummy's upper arms in contact with the seat back and the torso.

S16.3.3.3.2 Place the palms of the dummy in contact with the outside of the thighs.

S16.3.3.3.3 Place the little fingers in contact with the seat cushion.

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S20.1.2 Unless otherwise specified, each vehicle certified to this option shall comply in tests conducted with the front outboard passenger seating position, if adjustable fore and aft, at full rearward, middle, and full forward positions. If the child restraint or dummy contacts the vehicle interior, move the seat rearward to the next detent that provides clearance, or if the seat is a power seat, using only the control that primarily moves the seat fore and aft, move the seat rearward while assuring that there is a maximum of 5 mm (0.2 in) clearance between the dummy or child restraint and the vehicle interior.

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S20.1.9 *Seat set-up.* Unless otherwise stated.

S20.1.9.1 *Lumbar support adjustment.* Position adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position.

S20.1.9.2 *Other seat adjustments.* Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position.

S20.1.9.3 Set the seat and seat cushion in the position determined in S16.2.10.3.1.

S20.1.9.4 Using only the control that primarily moves the seat in the fore and aft direction, determine the full rearward, middle, and full forward positions of the SCRP. Using any part of any seat or seat cushion adjustments, other than that which primarily moves the seat or seat cushion fore-aft, determine the SCRP mid-point height for each of the three fore-aft test positions, while maintaining, as closely as possible, the seat cushion reference line middle angle determined in S16.2.10.3.1.

S20.1.9.5 The seat back angle, if adjustable, is set at the manufacturer's nominal design seat back angle for a 50th percentile adult male as specified in S8.1.3.

S20.1.9.6 If adjustable, set the head restraint at the full down and full forward position.

S20.1.10 The longitudinal centerline of a bucket seat cushion is defined by a vertical plane that passes through the SgRP and is parallel to the longitudinal centerline of the vehicle.

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S20.2.1.3 For bucket seats, "Plane B" refers to a vertical plane parallel to

the vehicle longitudinal centerline through the longitudinal centerline of the front outboard passenger vehicle seat cushion. For bench seats, "Plane B" refers to a vertical plane through the front outboard passenger vehicle seat parallel to the vehicle longitudinal centerline the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel.

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S20.3.1 Each vehicle certified to this option shall comply in tests conducted with the front outboard passenger seating position, if adjustable fore and aft, at the mid-height, in the full rearward and middle positions determined in S20.1.9.4, and the forward position determined in S16.3.3.1.8.

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S20.4.1 Position the front outboard passenger vehicle seat at the mid-height in the full forward position determined in S20.1.9.4, and adjust the seat back (if adjustable independent of the seat) to the nominal design position for a 50th percentile adult male as specified in S8.1.3. Position adjustable lumbar supports so that the lumbar support is in its lowest, retracted or deflated adjustment position. Position any adjustable parts of the seat that provide additional support so that they are in the lowest or most open adjustment position. If adjustable, set the head restraint at the full down and most forward position. If the child restraint or dummy contacts the vehicle interior, do the following: using only the control that primarily moves the seat in the fore and aft direction, move the seat rearward to the next detent that provides clearance; or if the seat is a power seat, move the seat rearward while assuring that there is a maximum of 5 mm (0.2 in) clearance.

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S20.4.4 For bucket seats, "Plane B" refers to a vertical plane parallel to the vehicle longitudinal centerline through the longitudinal centerline of the front outboard passenger seat cushion. For bench seats, "Plane B" refers to a vertical plane through the front outboard passenger seat parallel to the vehicle longitudinal centerline that is the same distance from the longitudinal centerline of the vehicle as the center of the steering wheel.

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S20.4.9 Deploy the front outboard passenger frontal air bag system. If the air bag system contains a multistage inflator, the vehicle shall be able to comply at any stage or combination of stages or time delay between successive stages that could occur in the presence