

**APPENDIX G**  
**DUMMY POSITIONING PROCEDURES FOR DRIVER AND PASSENGER**  
**TEST DUMMY CONFORMING TO SUBPART O OF PART 572**

**APPENDIX G****DUMMY POSITIONING PROCEDURES FOR TEST DUMMY CONFORMING TO SUBPART O  
OF PART 572****Seating Procedure 5<sup>th</sup> Percentile Female Driver Dummy (Part 572, Subpart O)  
(S16.2- S16.3)**

NHTSA No. \_\_\_\_\_

Test Date: \_\_\_\_\_

Laboratory: \_\_\_\_\_

Test Technician(s): \_\_\_\_\_

Test Number: \_\_\_\_\_

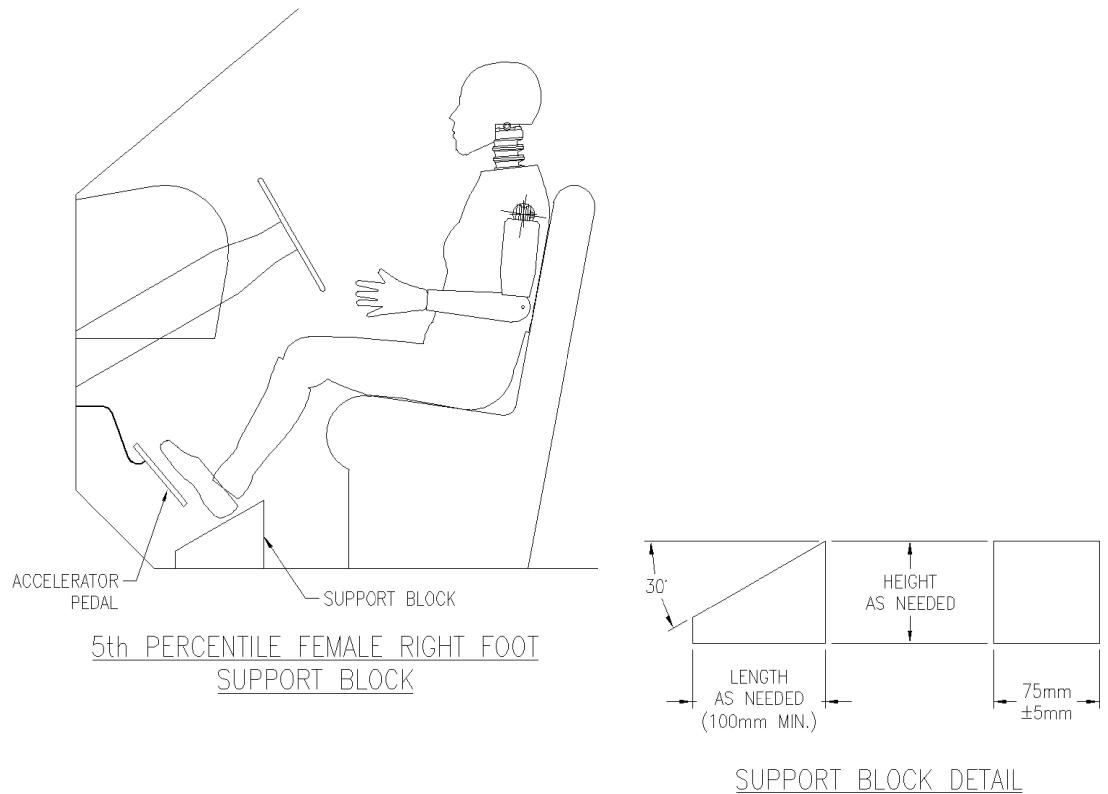
1. Using the markings made from data sheet 14.3 (If not done previously or steering repairs have been made, complete data sheet 14.3 at this time.) to position the steering controls in the mid-position or if applicable next lowest detent position. (S16.2.9)
2. Place the SCRP in the full rearward, mid-height position, and mid-seat cushion angle, determined during the completion of Data Sheet 14.1. (S16.3.2.1.1)
3. If the vehicle has an adjustable accelerator pedal, place it in the full forward position. (S16.3.2.2.1)
  - N/A accelerator pedal not adjustable
4. Fully recline the seat back. (S16.3.2.1.2)
  - N/A seat back not adjustable.
5. Place the dummy in the seat with the legs at an angle of 120 degrees to the thighs. The calves should not be touching the seat cushion. (S16.3.2.1.2)
6. Position the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion markings as determined in Data Sheet 14.1. (S16.3.2.1.3 and S16.3.2.1.4)
7. Hold down the dummy's thighs and push rearward on the upper torso to maximize the pelvic angle. (S16.3.2.1.5)
8. Set the angle between the legs and the thighs to 120 degrees. (S16.3.2.1.6)
9. Set the transverse distance between the centers of the front of the knees at 160 to 170 mm. (6.3 to 6.7 inches) Center the knee separation with respect to the longitudinal seat cushion marking as determined Data Sheet 14.1. (S16.3.2.1.6)
 

Record Knee Separation \_\_\_\_\_
10. Push rearward on the dummy's knees until the pelvis contacts the seat back, or the backs of the calves contact the seat cushion, whichever occurs first. (S16.3.2.1.6)
  - Pelvis contacted seat back.
  - Calves contacted seat cushion.
11. Gently rock the upper torso  $\pm$  5 degrees (approximately 51 mm (2 inches)) side-to-side three time. (S16.3.2.1.7)
12. If needed, extend the legs until the feet do not contact the floor pan. The thighs should be resting on the seat cushion. (S16.3.2.1.8)
13. Position the right foot until the foot is in line with a longitudinal vertical plane passing through the center of the accelerator pedal. Maintain the leg and thigh in a vertical plane. (S16.3.2.1.8)
14. Rotate the left leg and thigh laterally to equalize the distance between each knee and the longitudinal seat cushion marking as determined in Data Sheet 14.1. (S16.3.2.1.8)
15. Attempt to return the seat to the foremost fore-aft position, mid-height, and seat cushion mid-angle as determined in Data Sheet 14.2. The foot may contact and depress the accelerator and/or change the angle of the foot with respect to the leg. (S16.3.2.1.8)
  - Foremost position achieved. Proceed to step 20.
  - Foremost not achieved because of foot interference. Proceed to step 17.
  - Foremost not achieved because of steering wheel contact.
16. If either of the dummy's legs contact the steering wheel, move the steering wheel up the minimum amount required to avoid contact. If the steering wheel is not adjustable separate the knees the minimum required to avoid contact. (S16.3.2.1.8)
  - N/A- there was no leg contact

- Steering wheel repositioned
  - Knees separated
17. If the left foot interferes with the clutch or brake pedals, rotate the left foot about the leg to provide clearance. If this is not sufficient, rotate the thigh outboard at the hip the minimum amount required for clearance. (S16.3.2.1.8)
- N/A, No foot interference with pedals.
  - Foot adjusted to provide clearance.
  - Foot and Thigh adjusted to provide clearance.
18. Continue to move the seat. Use seat controls to line up the seat markings determined during the completion of Data Sheet 14.1 to set the foremost fore-aft position, mid-height position and the seat cushion mid-angle. If the dummy contacts the interior move the seat rearward until a maximum clearance of 5 mm (0.2 inches) is achieved or the seat is in the closest detent position that does not cause dummy contact. (S16.3.2.1.8)
- Foremost, mid-height position and the seat cushion mid-angle reached
  - Dummy contact. Clearance set at maximum of 5mm  
Measured Clearance \_\_\_\_\_
  - Dummy Contact. Seat set at nearest detent position.  
Seat position \_\_\_\_ detent positions rearward of foremost  
(foremost is position zero)
19. If the steering wheel was repositioned in step 16, return the steering wheel to the original position. If the steering wheel contacts the dummy before reaching the original position, position the wheel until a maximum clearance of 5mm (.2 inches) is achieved, or the steering wheel is in the closest detent position that does not cause dummy contact. (S16.3.2.1.8)
- N/A Steering wheel was not repositioned.
  - Original position achieved.
  - Dummy contact. Clearance set at maximum of 5mm  
Measured Clearance \_\_\_\_\_
  - Dummy Contact. Steering wheel set at nearest detent position.  
Steering wheel position \_\_\_\_ detent positions upward of original position.  
(Original position is position zero)
20. If the seat back is adjustable, rotate the seat back forward while holding the thighs in place. Continue rotating the seat back forward until the transverse instrument platform of the dummy head is level  $\pm$  0.5 degrees. If the head cannot be leveled using the seat back adjustment, or the seat back is not adjustable, use the lower neck bracket adjustment to level the head. If a level position cannot be achieved, minimize the angle. (S16.3.2.1.9)
- Head Level Achieved. (Check all that apply)
    - Head leveled using the adjustable seat back
    - Head leveled using the neck bracket.
  - Head Angle \_\_\_\_\_ degrees
- Head Level NOT Achieved. (Check all that apply)
  - Head adjusted using the adjustable seat back
  - Head adjusted using the neck bracket.
- Head Angle \_\_\_\_\_ degrees

- \_\_\_21. Verify the pelvis is not interfering with the seat bight. (S16.3.2.1.9)
  - \_\_\_No interference
  - \_\_\_Pelvis moved forward the minimum amount so that it is not caught in the seat bight.
- \_\_\_22. Verify the dummy abdomen is properly installed. (S16.3.2.1.9)
  - \_\_\_Abdomen still seated properly into dummy
  - \_\_\_Abdomen was adjusted because it was not seated properly into dummy
- \_\_\_23. Head Angle
  - \_\_\_N/A, neither the pelvis nor the abdomen were adjusted.
  - \_\_\_23.1 Head still level (Go to 24)
  - \_\_\_23.2 Head level adjusted
    - \_\_\_Head Level Achieved. (Check all that apply)
      - \_\_\_Head leveled using the adjustable seat back
      - \_\_\_Head leveled using the neck bracket.
    - \_\_\_Head Angle \_\_\_\_\_ degrees
    - \_\_\_Head Level NOT Achieved. (Check all that apply)
      - \_\_\_Head level adjusted using the adjustable seat back
      - \_\_\_Head level adjusted using the neck bracket.
    - \_\_\_Head Angle \_\_\_\_\_ degrees
- \_\_\_24. If the dummy torso contacts the steering wheel while performing step 20, reposition the steering wheel in the following order to eliminate contact. (S16.3.2.1.9)
  - \_\_\_N/A, No dummy torso contact with the steering wheel.
  - \_\_\_24.1 Adjust telescoping mechanism.
    - \_\_\_N/A No telescoping adjustment.
    - \_\_\_Adjustment performed (fill in appropriate change)
      - Steering wheel moved \_\_\_\_\_ detent positions in the forward direction.
      - Steering wheel moved \_\_\_\_\_ mm in the forward direction.
  - \_\_\_24.2 Adjust tilt mechanism.
    - \_\_\_N/A No tilt adjustment.
    - \_\_\_No adjustment performed.
    - \_\_\_Adjustment performed
      - Steering wheel moved \_\_\_\_\_ detent positions Upward/Downward.  
(circle one)
      - Steering wheel moved \_\_\_\_\_ degrees Upward/Downward
  - \_\_\_24.3 Adjust Seat in the aft direction.
    - \_\_\_No Adjustment performed.
    - \_\_\_Seat moved aft \_\_\_\_\_ mm from original position.
    - \_\_\_Seat moved aft \_\_\_\_\_ detent positions from the original position.
- \_\_\_25. Measure and set the pelvic angle using the pelvic angle gage TE-2504. The pelvic angle should be 20.0 degrees  $\pm$  2.5 degrees. If the pelvic angle cannot be set to the specified range because the head will not be level or because the dummy will have need major repositioning, adjust the pelvis as closely as possible to the angle range, but keep the head level. (S16.3.2.1.11)
  - \_\_\_Pelvic angle set to 20.0 degrees  $\pm$  2.5 degrees.
  - \_\_\_Pelvic angle of 20.0 degrees not achieved, the angular difference was minimized.
  - \_\_\_Record the pelvic angle. \_\_\_\_\_ degrees
- \_\_\_26. Check the dummy for contact with the interior after completing adjustments. (S16.3.2.1.12)
  - \_\_\_No contact.
  - \_\_\_Dummy in contact with interior.
    - \_\_\_Seat moved aft \_\_\_\_\_ mm from the previous position.
    - \_\_\_Seat moved aft \_\_\_\_\_ detent positions from the previous position.
- \_\_\_27. Check the dummy to see if additional interior clearance is obtained, allowing the seat to be moved forward. (S16.3.2.1.12)
  - \_\_\_N/A, Seat already at foremost position.
  - \_\_\_Clearance unchanged. No adjustments required.
  - \_\_\_Additional clearance available

- \_\_\_\_Seat moved Forward \_\_\_\_ mm from the previous position.  
\_\_\_\_Seat moved Forward \_\_\_\_ detent positions from the previous position.
- \_\_\_28. Driver's foot positioning, right foot. Place the foot perpendicular to the leg and determine if the heel contacts the floor pan at any leg position. If the heel contacts the floor pan proceed to step 29 otherwise, proceed to step 30. (S16.3.2.2.1)
- \_\_\_29. Perform the following steps until either all steps are completed, or the foot contacts the accelerator pedal. Step 29.6 shall be completed in all cases. (S16.3.2.2.1(a))
- \_\_\_29.1 With the rear of the heel contacting the floor pan, move the foot forward until pedal contact occurs or the foot is at the full forward position.
- \_\_\_29.2 If the vehicle has an adjustable accelerator pedal, move the pedals rearward until pedal contact occurs or the pedals reach the full rearward position.
- \_\_\_29.3 Extend the leg, allowing the heel to lose contact with the floor until the foot contacts the pedal. Do not raise the toe of the foot higher than the top of the accelerator pedal. If the foot does not contact the pedal, proceed to the next step. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.3)
- \_\_\_29.4 Angle the foot to achieve contact between the foot and the pedal. If the foot does not contact the pedal, return the foot to the perpendicular orientation. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.3)
- \_\_\_29.5 Align the centerline of the foot with the vertical-longitudinal plane passing through the center of the accelerator pedal. Place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward.  
(S16.3.2.2.3)
- \_\_\_29.6 Record foot position  
          \_\_\_\_Pedal Contact achieved. Contact occurred at step \_\_\_\_\_.  
              \_\_\_\_Heel contacts floor pan  
              \_\_\_\_Heel set \_\_\_\_ mm from floor pan.  
          \_\_\_\_Pedal Contact not achieved. Heel set \_\_\_\_ mm from the floor pan.

**FIGURE G1**

- 30. Perform the following steps until either all steps are completed, or the foot contacts the accelerator pedal. Step 30.5 shall be completed in all cases.
  - 30.1 Extend the leg until the foot contacts the pedal. Do not raise the toe of the foot higher than the top of the accelerator pedal. If the foot does not contact the pedal, proceed to the next step. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.1(b) & S16.3.2.2.3)
  - 30.2 If the vehicle has an adjustable accelerator pedal, move the pedals rearward until pedal contact occurs or the pedals reach the full rearward position. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.1(b) & S16.3.2.2.3)
    - N/A No pedal adjustment
  - 30.3 Angle the foot to achieve contact between the foot and the pedal. If the foot does not contact the pedal, return the foot to the perpendicular orientation. If pedal contact does occur, place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.2 & S16.3.2.2.3)
  - 30.4 Align the centerline of the foot in the same horizontal plane as the centerline of the accelerator pedal. Place a tapered foam block as shown in Figure G1 under the heel with the shallow part of the taper facing forward. (S16.3.2.2.3)
  - 30.5 Record foot position
    - Pedal Contact achieved. Contact occurred at step \_\_\_\_\_.
    - Heel set \_\_\_\_\_ mm from floor pan.
    - Pedal Contact not achieved. Heel set \_\_\_\_\_ mm from the floor pan.

- \_\_\_31. Driver's foot positioning, left foot.
  - \_\_\_31.1 Place the foot perpendicular to the leg and determine if the heel contacts the floor pan at any leg position. If the heel contacts the floor pan proceed to step 31.2, otherwise position the leg as perpendicular to the thigh as possible with the foot parallel to the floor pan. (S16.2.2.6)
  - \_\_\_31.2 Place the foot on the toe board with the heel resting on the floor pan as close to the intersection of the floor pan and the toe board as possible. Adjust the angle of the foot if necessary to contact the toe board. If the foot will not contact the toe board, set the foot perpendicular to the leg, and set the heel on the floor pan as far forward as possible. Avoid contact with the brake pedal, clutch pedal, wheel well projection, and footrest. To avoid this contact use the following three manipulations in the order listed, with each subsequent option incorporating the previous, until contact is avoided: rotate the foot about the lower leg (abduction/adduction), plantar flex the foot, rotate the leg outboard about the hip. Movement should be the minimum amount necessary. If it is not possible to avoid all foot contact, give priority to avoiding brake or clutch pedal contact. (S16.2.2.4 & S16.2.2.5 & S16.2.2.7)
    - \_\_\_No contact
    - \_\_\_Foot rotated about the leg (abduction/adduction)
    - \_\_\_Foot rotated about the leg, and foot plantar flexed
    - \_\_\_Foot rotated about the leg, foot plantar flexed, and the leg rotated about the hip.
  - \_\_\_31.3 Record foot position.
    - \_\_\_Heel does not contact floor pan.
    - \_\_\_Heel on floor pan and foot on toe board.
    - \_\_\_Heel on floor pan and foot not on toe board.
- \_\_\_32. Driver arm/hand positioning.
  - \_\_\_32.1 Place the dummy's upper arms adjacent to the torso with the arm centerlines as close to a vertical longitudinal plane as possible. (S16.3.2.3.1)
  - \_\_\_32.2 Place the palms of the dummy in contact with the outer part of the steering wheel rim at its horizontal centerline with the thumbs over the steering wheel rim. (S16.3.2.3.2)
  - \_\_\_32.3 If it is not possible to position the thumbs inside the steering wheel rim at its horizontal centerline, then position them above and as close to the horizontal centerline of the steering wheel rim as possible. (S16.3.2.3.3)
  - \_\_\_32.4 Lightly tape the hands to the steering wheel rim so that if the hand of the test dummy is pushed upward by a force of not less than 9 N (2 lb) and not more than 22 N (5 lb), the tape releases the hand from the steering wheel rim. S16.3.2.3.4
- \_\_\_33. Adjustable head restraints
  - \_\_\_N/A, there is no head restraint adjustment
  - \_\_\_33.1 If the head restraint has an automatic adjustment, leave it where the system positions the restraint after the dummy is placed in the seat. (S16.3.4.1) Go to 34.
  - \_\_\_33.2 Adjust each head restraint vertically so that the mid-horizontal plane determined in Data Sheet 14.1 is aligned with the center of gravity (CG) of the dummy head. (S16.3.4.3)
    - \_\_\_N/A midpoint position attained in previous step
    - \_\_\_Headrest set at nearest detent below the head CG
  - \_\_\_33.3 If the above position is not attainable, move the vertical center of the head restraint to the closest detent below the center of the head CG. (S16.3.4.3)
    - \_\_\_N/A midpoint position attained in previous step
    - \_\_\_Headrest set at nearest detent below the head CG
  - \_\_\_33.4 If the head restraint has a fore and aft adjustment, place the restraint in the foremost position or until contact with the head is made, whichever occurs first. (S16.3.4.4)

\_\_\_\_34. Driver and passenger manual belt adjustment (for tests conducted with a belted dummy).  
(S16.3.5)

\_\_\_\_34.1 If an adjustable seat belt D-ring anchorage exists, place it in the manufacturer's design position for a 5th percentile adult female. (S16.3.5.1) **This information will be supplied by the COTR.**

Manufacturer's specified position \_\_\_\_\_

Actual Position \_\_\_\_\_

\_\_\_\_34.2 Place the Type 2 manual belt around the test dummy and fasten the latch.  
(S16.3.5.2)

\_\_\_\_34.3 Ensure that the dummy's head remains as level as possible. (S16.3.5.3)

\_\_\_\_34.4 Remove all slack from the lap belt. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this operation four times. Apply a 9 N (2 lbf) to 18 N (4 lbf) tension load to the lap belt. If the belt system is equipped with a tension-relieving device, introduce the maximum amount of slack into the upper torso belt that is recommended by the manufacturer. If the belt system is not equipped with a tension-relieving device, allow the excess webbing in the shoulder belt to be retracted by the retractive force of the retractor. (S16.3.5.4)

I certify that I have read and performed each instruction.

\_\_\_\_\_ Date

**Seating Procedure 5<sup>th</sup> Percentile Female Passenger Dummy  
(Part 572, Subpart O) (S16.2- S16.3)**

NHTSA No. \_\_\_\_\_ Test Date: \_\_\_\_\_

Laboratory: \_\_\_\_\_ Test Technician(s): \_\_\_\_\_

Test Number: \_\_\_\_\_

(Check this item ONLY if it applies to this vehicle.)

**The passenger seat adjustments are controlled by the adjustments made to the driver's seat. Therefore, positioning of the passenger dummy is made simultaneously with the driver dummy. Adjustments made to the seat to position the driver will over ride any adjustments that would normally be made to position the passenger. (S16.2.10.3)**

- \_\_\_\_ 1. Place the SCRP in the full rearward, mid-height position, and mid-seat cushion angle, determined during the completion of Data Sheet 14.1. (S16.3.3.1.1)
  - \_\_\_\_ 2. Fully recline the seat back. (S16.3.3.1.2)
    - \_\_\_\_ N/A seat back not adjustable.
  - \_\_\_\_ 3. Place the dummy in the seat with the legs at an angle of 120 degrees to the thighs. The calves should not be touching the seat cushion. (S16.3.3.1.2)
  - \_\_\_\_ 4. Position the dummy in the seat such that the midsagittal plane is coincident with the longitudinal seat cushion marking that was determined in Data Sheet 14.1. (S16.3.3.1.3 and S16.3.3.1.4)
  - \_\_\_\_ 5. Hold down the dummy's thighs and push rearward on the upper torso to maximize the pelvic angle. (S16.3.3.1.5)
  - \_\_\_\_ 6. Set the angle between the legs and the thighs to 120 degrees. (S16.3.3.1.6)
  - \_\_\_\_ 7. Set the transverse distance between the centers of the front of the knees at 160 to 170 mm. (6.3 to 6.7 inches). Center the knee separation with respect to the longitudinal seat cushion marking that was determined Data Sheet 14.1. (S16.3.3.1.6)
 

Record Knee Separation \_\_\_\_\_
  - \_\_\_\_ 8. Push rearward on the dummy's knees until the pelvis contacts the seat back, or the backs of the calves contact the seat cushion, whichever occurs first. (S16.3.3.1.6)
    - \_\_\_\_ Pelvis contacted seat back.
    - \_\_\_\_ Calves contacted seat cushion.
  - \_\_\_\_ 9. Gently rock the upper torso  $\pm$  5 degrees (approximately 51 mm (2 inches)) side-to-side three times. (S16.3.3.1.7)
  - \_\_\_\_ 10. If needed, extend the legs until the feet do not contact the floor pan. The thighs should be resting on the seat cushion. (S16.3.3.1.8)
  - \_\_\_\_ 11. Use seat controls to line up the seat markings determined during the completion of Data Sheet 14.1 to set the foremost fore-aft position, mid-height position and the seat cushion mid-angle. If the dummy contacts the interior move the seat rearward until a maximum clearance of 5 mm (0.2 inches) is achieved or the seat is in the closest detent position that does not cause dummy contact. (S16.3.3.1.8)
    - \_\_\_\_ Foremost, mid-height position and the seat cushion mid-angle reached
    - \_\_\_\_ Dummy contact. Clearance set at maximum of 5mm  
Measured Clearance \_\_\_\_\_
    - \_\_\_\_ Dummy Contact. Seat set at nearest detent position.  
Seat position \_\_\_\_ detent positions rearward of foremost  
(foremost is position zero)
  - \_\_\_\_ 12. If the seat back is adjustable, rotate the seat back forward while holding the thighs in place. Continue rotating the seat back forward until the transverse instrument platform of the dummy head is level  $\pm$  0.5 degrees. If head cannot be leveled using the seat back adjustment, or the seat back is not adjustable, use the lower neck bracket adjustment to level the head. If a level position cannot be achieved, adjust the head as closely as possible to the  $\pm$  0.5 degree range. (S16.3.3.1.9 and S16.3.3.1.10)
- (Check All That Apply)

- Seat back not adjustable
- Seat back not independent of driver side seat back
- Head Level Achieved. (Check all that apply)
  - Head leveled using the adjustable seat back
  - Head leveled using the neck bracket.
 

Head Angle \_\_\_\_\_ degrees
- Head Level NOT Achieved. (Check all that apply)
  - Head adjusted using the adjustable seat back
  - Head adjusted using the neck bracket.
 

Head Angle \_\_\_\_\_ degrees
- 13. Verify the pelvis is not interfering with the seat bight. (S16.3.3.1.9)
  - No interference
  - Pelvis moved forward the minimum amount so that it is not caught in the seat bight.
- 14. Verify the dummy abdomen is properly installed. (S16.3.3.1.9)
  - Abdomen still seated properly into dummy
  - Abdomen was adjusted because it was not seated properly into dummy
- 15. Head Angle
  - N/A, neither the pelvis nor the abdomen were adjusted.
  - 15.1 Head still level (Go to 16)
  - 15.2 Head level adjusted
    - Head Level Achieved. (Check all that apply)
      - Head leveled using the adjustable seat back
      - Head leveled using the neck bracket.
 

Head Angle \_\_\_\_\_ degrees
    - Head Level NOT Achieved. (Check all that apply)
      - Head adjusted using the adjustable seat back
      - Head adjusted using the neck bracket.
 

Head Angle \_\_\_\_\_ degrees
- 16. Measure and set the pelvic angle using the pelvic angle gage TE-2504. The pelvic angle should be 20.0 degrees  $\pm$  2.5 degrees. If the pelvic angle cannot be set to the specified range because the head will not be level or because the dummy will have need major repositioning, adjust the pelvis as closely as possible to the angle range, but keep the head level.
  - Pelvic angle set to 20.0 degrees  $\pm$  2.5 degrees.
  - Pelvic angle of 20.0 degrees not achieved, the angular difference was minimized.
  - Record the pelvic angle. \_\_\_\_\_ degrees
- 17. Check the dummy for contact with the interior after completing adjustments.
  - No contact.
  - Dummy in contact with interior.
    - Seat moved aft \_\_\_\_ mm from the previous position.
    - Seat moved aft \_\_\_\_ detent positions from the previous position.
- 18. Verify the transverse instrument platform of the dummy head is level +/- 0.5 degrees. Use the lower neck bracket adjustment to level the head. If a level position cannot be achieved, minimize the angle. (S16.3.3.1.9, S16.3.3.1.10, and S16.3.3.1.11)
  - Head Level Achieved
 

Head Angle \_\_\_\_\_ degrees
  - Head Level NOT Achieved.
 

Head Angle \_\_\_\_\_ degrees
- 19. Check the dummy to see if additional interior clearance is obtained, allowing the seat to be moved forward. (S16.3.3.1.12)
  - N/A Bench Seat
  - N/A Seat already at full forward position.
  - Clearance unchanged. No adjustments required.
  - Additional clearance available
    - Seat moved Forward \_\_\_\_ mm from the previous position.
    - Seat moved Forward \_\_\_\_ detent positions from the previous position.

- \_\_\_\_Seat moved Forward, Full Forward position reached.
- \_\_\_20. Passenger foot positioning. (Indicate final position achieved) (S16.3.3.2)
- \_\_\_20.1 Place feet flat on the toe board; OR (S16.3.3.2.1)
  - \_\_\_20.2 If the feet cannot be placed flat on the toe board, set the feet perpendicular to the lower leg, and rest the heel as far forward on the floor pan as possible; OR (S16.3.3.2.2)
  - \_\_\_20.3 If the heels do not touch the floor pan, set the legs as perpendicular to the thighs as possible and set the feet parallel to the floor pan. (S16.3.3.2.2)
- \_\_\_21. Passenger arm/hand positioning. (S16.3.3.3)
- \_\_\_21.1 Place the dummy's upper arms adjacent to the torso with the arm centerlines as close to a vertical longitudinal plane as possible. (S16.3.3.3.1)
  - \_\_\_21.2 Place the palms of the dummy in contact with the outer part of the thighs (S16.3.3.3.2)
  - \_\_\_21.3 Place the little fingers in contact with the seat cushion. (S16.3.3.3.3)
- \_\_\_22. Adjustable head restraints (S16.3.4)
- \_\_\_N/A, there is no head restraint adjustment
- \_\_\_22.1 If the head restraint has an automatic adjustment, leave it where the system positions the restraint after the dummy is placed in the seat. (S16.3.4.1) Go to 23.
  - \_\_\_22.2 Adjust each head restraint vertically so that the horizontal plane determined in Data Sheet 14.1 is aligned with the center of gravity (CG) of the dummy head. (S16.3.4.3)
  - \_\_\_22.3 If the above position is not attainable, move the vertical center of the head restraint to the closest detent below the center of the head CG. (S16.3.4.3)
    - \_\_\_N/A midpoint position attained in previous step
    - \_\_\_Headrest set at nearest detent below the head CG
  - \_\_\_22.4 If the head restraint has a fore and aft adjustment, place the restraint in the foremost position or until contact with the head is made, whichever occurs first. (S16.3.4.4)
- \_\_\_23. Manual belt adjustment (for tests conducted with a belted dummy) S16.3.5
- \_\_\_N/A, Unbelted test
- \_\_\_23.1 If an adjustable seat belt D-ring anchorage exists, place it in the manufacturer's design position for a 5th percentile adult female. **This information will be supplied by the COTR.** (S16.3.5.1)  
Manufacturer's specified position \_\_\_\_\_
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Actual Position \_\_\_\_\_

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- \_\_\_23.2 Place the Type 2 manual belt around the test dummy and fasten the latch. (S16.3.5.2)
- \_\_\_23.3 Ensure that the dummy's head remains as level as possible. (S16.3.5.3)
- \_\_\_23.4 Remove all slack from the lap belt. Pull the upper torso webbing out of the retractor and allow it to retract; repeat this operation four times. Apply a 9 N (2 lbf) to 18 N (4 lbf) tension load to the lap belt. If the belt system is equipped with a tension-relieving device, introduce the maximum amount of slack into the upper torso belt that is recommended by the manufacturer. If the belt system is not equipped with a tension-relieving device, allow the excess webbing in the shoulder belt to be retracted by the retractive force of the retractor. (S16.3.5.4)