

VEHICLE INFORMATION / TEST SPECIFICATIONS

FMVSS No. 201P, 208, 214D & 301

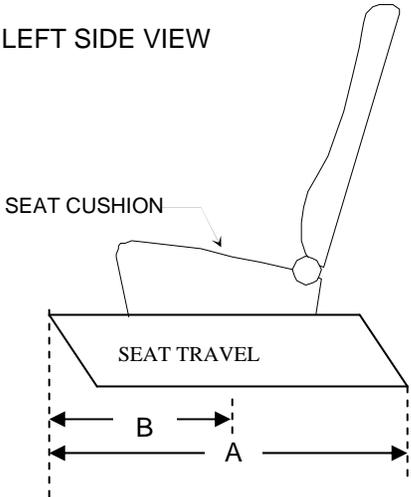
Vehicle Model Year and Make: _____

Vehicle Model and Body Style: _____

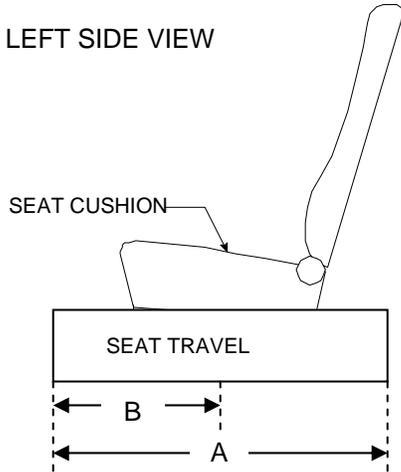
1. SEAT MID FORE - AFT POSITION, HEIGHT, AND CUSHION ANGLE

The rearmost position is determined by using all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the rearmost position. The forward most position is determined by using all the seat controls that have any affect on the fore-aft movement of the seat to move the seat cushion to the foremost position. The mid position is then determined from these two extremes. (Refer to the diagrams below to assist in attaining proper measurements specific to seat travel area type. A = Complete range of travel and $B = A/2$.) While maintaining the mid position, the seat is moved to its lowest position.

SEAT TRAVEL TYPE 1



SEAT TRAVEL TYPE 2



1.1 Driver's Seat

Manual seat track adjusters: Total number of detents: _____

Mid Fore-Aft Seat detent (with the forward-most detent defined as 0): _____

Power seat track adjusters: Complete range of travel (A): _____ mm

Distance from the forward-most position to the test position (B): _____ mm

Seat cushion angle: If the seat cushion angle is adjustable while maintaining the mid fore-aft seat track, describe the angle used during certification testing, how to measure it, and any reference points. (Include photographs.)

Seat cushion height: If the seat height is adjustable at the mid fore-aft seat track position and can be adjusted so that the seat cushion angle can be at the angle used in the certification test, describe the height used during certification testing, how to measure it and any reference points. (Include photographs.)

Provide any other instructions for positioning the seat at the center of fore and aft travel, with the certification seat cushion angle, at the lowest height:

1.2 Front Outboard Passenger seat:

Manual seat track adjusters: Total number of detents: _____

Mid Fore-Aft Seat detent (with the forward-most detent defined as 0): _____

Power seat track adjusters: Complete range of travel (A): _____ mm

Distance from the forward-most position to the test position (B): _____ mm

Seat cushion angle: If the seat cushion angle is adjustable while maintaining the mid fore-aft seat track, describe the angle used during certification testing, how to measure it, and any reference points. (Include photographs.)

Seat cushion height: If the seat height is adjustable at the mid fore-aft seat track position and can be adjusted so that the seat cushion angle can be at the angle used in the certification test, describe the height used during certification testing, how to measure it, and any reference points. (Include photographs.)

Provide any other instructions for positioning the seat at the center of fore-aft travel, with the certification seat cushion angle, and at the lowest height:

1.3 Rear Seats (side impact ONLY)

Manual seat track adjusters: Total number of detents: _____
 Mid Fore-Aft Seat detent (with the forward-most detent defined as 0): _____

Power seat track adjusters: Complete range of travel (A): _____ mm
 Distance from the forward-most position to the test position (B): _____ mm

Seat cushion angle: If the seat cushion angle is adjustable while maintaining the mid fore-aft seat track, describe the angle used during certification testing, how to measure it, and any reference points. (Include photographs.)

Seat cushion height: If the seat height is adjustable at the mid fore-aft seat track position and can be adjusted so that the seat cushion angle can be at the angle used in the certification test, describe the height used during certification testing, how to measure it, and any reference points. (Include photographs.)

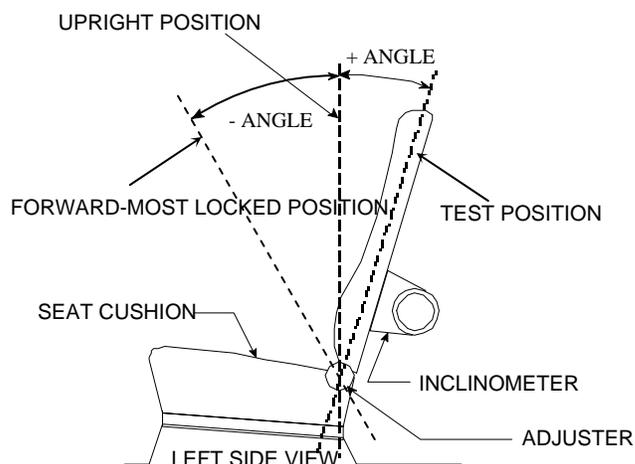
Provide any other instructions for positioning the seat at the center of fore-aft travel, with the certification seat cushion angle, and at the lowest height:

2. 50th MALE NOMINAL DESIGN RIDING POSITION SEAT BACK ANGLE

2.1 Driver's Seat

With the seat in the mid fore-aft seat track position, what is the angle of the seat back when it is in the forward-most locked position? _____

With the seat in the mid fore-aft seat track position, what is the angle of the driver's seat back when it is in the



nominal design riding position (S8.1.3)? _____

Is the seat back angle measured with the dummy in the seat? Yes____ No____

Describe any references used for measuring the seat back angle, e.g., door sill.
(Include photographs.)

2.2 Front Outboard Passenger Seat

With the seat in the mid fore-aft seat track position, what is the angle of the seat back when it is in the forward-most locked position? _____

With the seat in the mid fore-aft seat track position, what is the angle of the driver's seat back when it is in the nominal design riding position (S8.1.3)? _____

Is the seat back angle measured with the dummy in the seat? Yes____ No____

Describe any references used for measuring the seat back angle, e.g., door sill.
(Include photographs.)

2.3 2nd Row Seat

With the seat in the mid fore-aft seat track position, what is the angle of the seat back when it is in the forward-most locked position? _____

With the seat in the mid fore-aft seat track position, what is the angle of the driver's seat back when it is in the nominal design riding position? _____

Is the seat back angle measured with the dummy in the seat?
Yes____ No____

Describe any references used for measuring the seat back angle, e.g., door sill.
(Include photographs.)

2.4 3rd Row Seat

With the seat in the mid fore-aft seat track position, what is the angle of the seat back when it is in the forward-most locked position? _____

With the seat in the mid fore-aft seat track position, what is the angle of the driver's seat back when it is in the nominal design riding position? _____

Is the seat back angle measured with the dummy in the seat?

Yes___ No___

Describe any references used for measuring the seat back angle, e.g., door sill.
(Include photographs.)

3. **ADJUSTABLE D-RING SEAT BELT ANCHORAGE POSITION**

50th Male nominal design position

Range of travel: _____ mm

Distance from the upper-most position to the nominal design position:
_____ mm

If detents are available, total number of detents: _____

Nominal design position detent (with the upper-most detent defined as 0):

5th Female nominal design position

Range of travel: _____ mm

Distance from the upper-most position to the nominal design position:
_____ mm

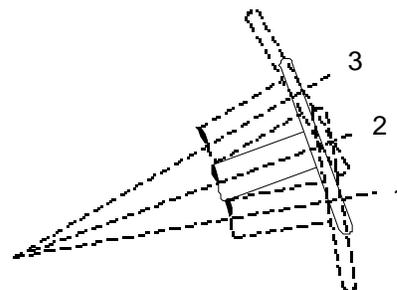
If detents are available, total number of detents: _____

Nominal design position detent (with the upper-most detent defined as 0):

4. **STEERING COLUMN AND WHEEL ADJUSTMENTS**

If the steering wheel and /or steering column adjustments are available, provide any specific procedures used to determine the geometric center of the locus the steering wheel hub describes when it is moved through its full range of driving positions.

STEERING COLUMN ASSEMBLY



LEFT SIDE VIEW

Angle of the steering wheel with respect to vertical when the steering wheel hub is positioned at the geometric center of the locus it describes when it is moved through its full range of driving positions: _____ degrees

If detents are also available, please provide the following:

Total number of detents: _____

Test detent when steering wheel hub is positioned at the geometric center of the locus it describes when it is moved through its full range of driving positions (with the upper-most detent defined as 0): _____

5. DUMMY MEASUREMENTS FOR THE 50TH MALE AND 5TH FEMALE

See the attached instructions and diagram and provide measurements for the following seat configurations

Driver (Manual Seat)

Driver (Power Seat)

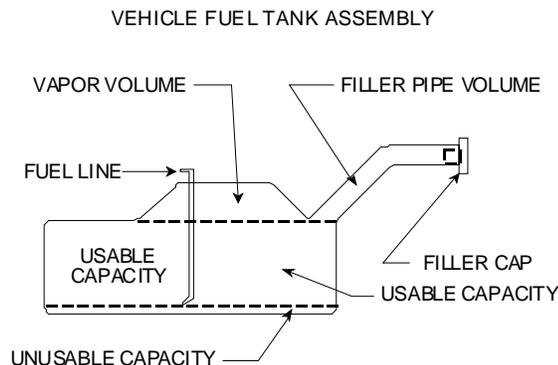
Passenger (Manual Seat)

Passenger (Power Seat)

Second Row Occupant (Side impacts only)

6. FUEL TANK CAPACITY DATA

- 6.1. a) "Usable Capacity" of standard equipment fuel tank = _____ gallons.
- b) "Usable Capacity" of optional equipment fuel tank = _____ gallons.
- c) Capacity used when certification testing to requirements of FMVSS No. 301 = _____ gallons.



Operational instructions:

Suggested methods for draining:

- 6.2. Is vehicle equipped with electric fuel pump? Yes _____ No _____

If YES, does pump normally operate when vehicle's electrical system is activated?

Yes _____ No _____

If YES, explain the vehicle operating conditions under which the fuel pump will pump fuel:

7. **FUEL TANK LOCATION**

Provide drawing (or description) that shows the undercarriage view and/or location.

8. **FRONT OUTBOARD PASSENGER SEAT**

Is the air bag activated when a 5th percentile female or 50th percentile male dummy is in the seat?

___ YES ___ NO (System bypass information needed)

9. **SPECIAL INSTRUCTIONS**

Please make note of any special instructions that you would like NHTSA to consider or be made aware of for the tested vehicle (ex. towing setup, refrain from using seat belt load cells, etc.):

DESCRIPTIONS OF DUMMY MEASUREMENTS

When a level is to be used, it is to ensure that the line containing the two points described is either parallel or perpendicular to the ground. If a measurement to be made is less than 10 inches ignore the directions to use a level and approximate a level measurement. Also, when a measurement is to be taken to or from the center of a bolt on the dummy, take the measurement from the center of the bolt hole if the bolt is recessed.

The following measurements are to be made within a vertical longitudinal plane.

HH - Head to Header, taken from the point where the dummy's nose meets his forehead (between his eyes) to the furthest point forward on the header.

CS - Steering Wheel to Chest, taken from the center of the steering wheel hub to the dummy's chest. Use a level.

NR - Nose to Rim, taken from the tip of the dummy's nose to the closest point on the top of the steering wheel rim. Also indicate the angle this line makes with respect to the horizontal (NA).

KDL, KDR - Left and Right Knees to Dashboard, taken from the center of the knee pivot bolt's outer surface to the closest point forward acquired by swinging the tape measure in continually larger arcs until it contacts the dashboard. Also reference the angle of this measurement with respect to the horizontal for the outboard knee (KDA).

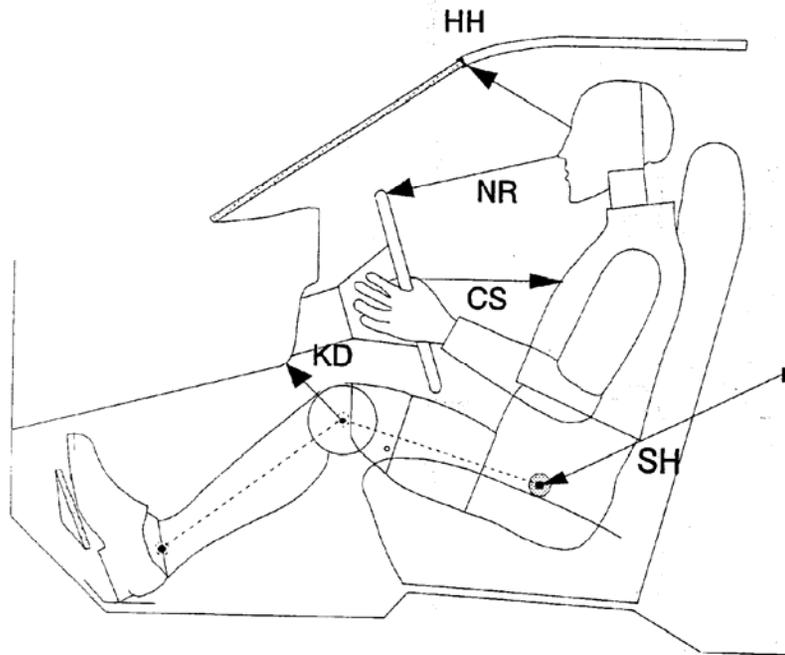
SH - Striker to Hip, this measurement is to be taken in the X-Z plane measured from the forward most center point on the striker to the center of the H-point. When taking this measurement a firm device that can be rigidly connected to the striker should be used. The measurement in the Y (transverse) direction from the striker to the H-point should also be taken (SHY).

The following measurements are to be made within a vertical transverse plane.

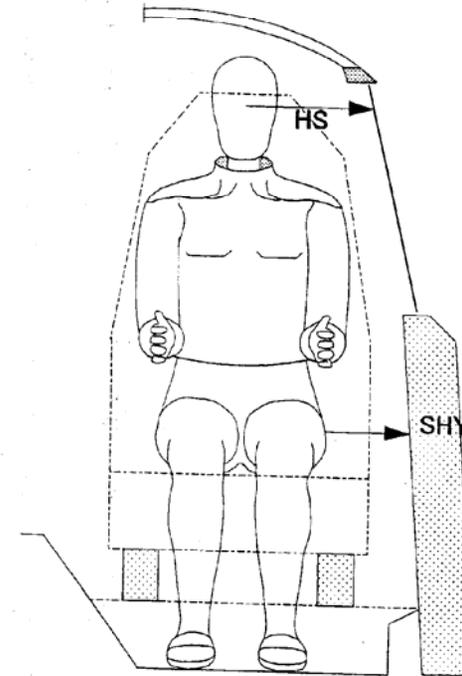
HS - Head to Side Window, taken from the point where the dummy's nose meets his forehead (between his eyes) to the outside of the side window. In order to make this measurement, roll the window down to the exact height which allows a level measurement. Use a level.

SHY - Striker to H-point, taken from a rod rigidly connected to the forward most center point on the striker to the H-point. Use a level.

DUMMY MEASUREMENTS FOR FRONT SEAT PASSENGERS



HH - Head to Header
 NR - Nose to Rim
 CS - Steering Wheel to Chest
 KDL/KDR - Knee to Dash
 SH - Striker to H-Point



SHY - Striker to H-Point (Y Dir.)
 HS - Head to Side Window

July 10, 1992

FORM - CRASH TESTS