## **VEHICLE INFORMATION / TEST SPECIFICATIONS**

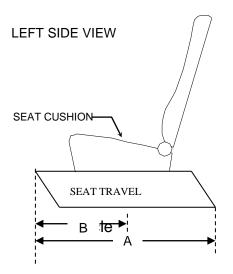
FMVSS No. 301

Vehicle Model Year and Make:	
Vahiala Madal and Bady Ctyler	
Vehicle Model and Body Style:	

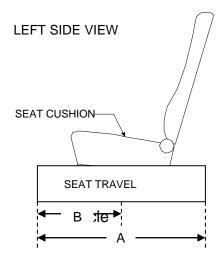
### 1. SEAT MID FORE - AFT POSITION, HEIGHT, AND CUSHION ANGLE

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 position travel, with the certification seat cushion a	
1.3	Rear Seats (side impact ONLY)	
	Manual seat track adjusters: Total number Mid Fore-Aft Seat detent (with the forward	
	Power seat track adjusters: Complete ran Distance from the forward-most position to	
	Seat cushion angle: If the seat cushion armid fore-aft seat track, describe the angle measure it, and any reference points. (Inc.	used during certification testing, how to
	Seat cushion height: If the seat height is position and can be adjusted so that the sused in the certification test, describe the how to measure it, and any reference points.	seat cushion angle can be at the angle height used during certification testing,
	Provide any other instructions for position travel, with the certification seat cushion a	
2.	50th MALE NOMINAL DESIGN RIDING POSITION SEAT BACK ANGLE	UPRIGHT POSITION + 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?	FORWARD-MOST LOCKED POSITION TEST POSITION  SEAT CUSHION
	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	INCLINOMETER  LEFT SIDE VIEW  ADJUSTE

	nominal design riding position (FMVSS 208 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 (FMVSS 208 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	2 <sup>nd</sup> 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?

Describe any references used for measuring the s (Include photographs.)	eat back angle, e.g., door sill.
ADJUSTABLE D-RING SEAT BELT ANCHORAG	GE POSITION
50 <sup>th</sup> Male nominal design position Range of travel: mm	
Distance from the upper-most position to the nomi mm	nal design position:
If detents are available, total number of detents: Nominal design position detent (with the upper-mo	
5 <sup>th</sup> Female nominal design position Range of travel: mm Distance from the upper-most position to the nomi mm	nal design position:
If detents are available, total number of detents:	
STEERING COLUMN AND WHEEL ADJUSTMEN	NTS
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 ASSEM
	LEFT SIDE VIEW

	Total number of determined Test detent when ste	eering wheel hub is po nen it is moved throug	de the following:  ositioned at the geometrich its full range of driving	
5.	DUMMY MEASURE	MENTS FOR THE 50	OTH MALE AND 5TH FEM	<u>ALE</u>
	following seat config Driver (Manual Seat) Driver (Power Seat) Passenger (Manual Passenger (Power S	urations Seat)	n and provide measurem	ents for the
6.	usable capacity. The volume of the fuel ta	in Part 571.3 as the feterm does not include the filler neck.)	uel tanks unusable capa de the vapor volume of th	ne tank nor the
	Fuel Tank Capacity 301= gallo		n testing to requirements	s of FMVSS No.
6.1.	Standard Fuel Tank	<b>(</b>	VEHICLE FUE	ELTANK ASSEMBLY
		(gallons)	VAPOR VOLUME —	FILLER PIPE VOLUME
	Usable Capacity			
	Unusable Capacity		FUEL LINE	
	Total Capacity		<u></u>	/
			USABLE CAPACITY	FILLER CAP USABLE CAPACIT
	Optional Fuel Tank	s	<u> </u>	OOADEE ON ACIT
	Haabla Canaaita	(gallons)	UNU SABLE CAPACITY —	_/
	Usable Capacity			
	Unusable Capacity			
	Total Capacity			
•	Operational instruction	ons:		

	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 5 <sup>th</sup> percentile female or 50 <sup>th</sup> percentile male dummy is in the seat?
	YESNO (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.

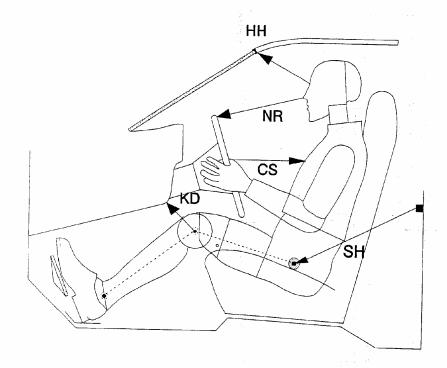
The following measurements are to be made within a vertical longitudinal plane.

- 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.

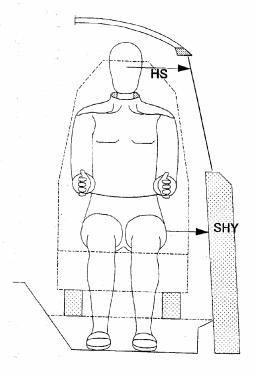
# DUMMY MEASUREMENTS FOR FRONT SEAT PASSENGERS



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