TASS Testnumber: S17310121



Customer: Rulsego			
Testdate: 10-08-2017			
DYNAMIC test – Acceleration Sled			
Туре	Sango-R		
ATD used, dummy mass	H3-95th, 102kg		
Position seat	horizontal		
Impact	Frontal		
Orientation	Forward facing		
Anchorages used	Straps of testhouse used		
Headrest used yes/no	Yes		
Wheelchair anchored pelvic-belt restraint	no		
Wheelchair-anchored shoulder-belt restraint	no		
Accommodation of vehicle-anchored occupant belt restraints	no		
	DYNAMIC test — Acceleration Sled Type ATD used, dummy mass Position seat Impact Orientation Anchorages used Headrest used yes/no Wheelchair anchored pelvic-belt restraint Wheelchair-anchored shoulder-belt restraint		

			Limits	Pass/Fail
	Impact speed (delta v)	50.69	48-50 km/h	
5.2.1.a	Horz. Excursion limits [mm]:			
	Point P:	54	200mm	pass
	ATD knee:	244	375mm	pass
	Front head:	313	650mm	pass
	Rear head:	109	-450mm	pass
5.2.1.b	ATD knee/Point P	4.5	≥ 1.1	pass
5.2.2.a	Torso angle after [°]:	19° from vertical	<45° from vertical	pass
5.2.2.c1	Batteries of powered wheelchair did not remove outside the wheelchair			pass
	footprint			
5.2.2.c2	Batteries of powered wheelchair did not move ino the wheelchair user's			pass
	space (e.g. no contact with the back of the ATD's legs)			
5.2.2.i	H-point ATD [mm]:			
	Before vert:	622		
	After vert:	580		
	Difference [%]:	7	≤ 20 %	pass
	Remarks:			
5.2.2.b	The wheelchair securement points shall not show visible signs of material			pass
	failure.			
5.2.2.c	Rigid components, fragments or accessories of the wheelchair with a mass		<100gr	pass
	in excess of 100 g shall not be completely separated from the wheelchair.			
5.2.2.d	Wheelchair components that may contact the occupant shall not fragment			pass
3.2.2.u	or separate in a manner that produces sharp edges, defined by as having a			pass
	radius of less than 2 mm.			
F 2 2 -	Primary load-carrying components of the wheelchair shall not show visible			nacc
5.2.2.e	signs of failure, unless there is a backup system to provide support.			pass
	signs of failure, utiless there is a backup system to provide support.			
5.2.2.f	Locking mechanisms of tilting seating adjusters shall not show signs of			pass
	failure.			
5.2.2.g	Removal of the ATD from the wheelchair shall not require the use of tools,			pass
	other than a hoist to lift the ATD.			
5.2.2.h	Release of the wheelchair from the tiedown system shall not require the use			pass
	of tools.			
5.2.2.j	The wheelchair and its components shall not cause partial or complete			pass
	failure of the webbing of any of the WTORS assemblies during the test.			
5.3a	Accessibility of securement points:	3s	<10s	pass
	allow one-handed attachment and engagement of the hook gauge within a	53	103	pass
	time period of 10 s,			
E 2h	,	2c	<10c	pass
5.50	·	38	\105	pass
5.3b	Accessibility of securement points: allow one-handed disengagement and removal of the same hook gauge within a time period of 10 s,	3s	<10s	

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ISO7176-19	Customer: Rulsego			
paragraph	Testdate: 10-08-2017			
	Accommodation of <u>vehicle-anchored</u> belt restraints. Static a	ssessment.		
5.4 Annex D1	Overall ease of belt positioning		Score 0 = Poor 1 = Acceptable 2 = Good	2
5.4 Annex D2	Pelvic-belt-restraint contact area		Score 0 = Poor 1 = Acceptable 2 = Good	2
5.4 Annex D3	Shoulder-belt-restraint contact area		Score 0 = Poor 1 = Acceptable 2 = Good	2
5.4 Annex D4	Pelvic-belt-restraint contact location		Score 0 = Poor 1 = Acceptable 2 = Good	2
5.4 Annex D5	Shoulder-belt-restraint contact location		Score 0 = Poor 1 = Acceptable 2 = Good	2
5.4 Annex D6	Pelvic-belt-restraint angle	36°	Score 0 = Poor 1 = Acceptable 2 = Good	1
5.4 Annex D7	Pelvic-belt-restraint clear paths to anchor points		Score 0 = Poor 1 = Acceptable 2 = Good	2
5.4 Annex D8	Belt-restraint proximity to sharp edges		Score 0 = Poor 1 = Acceptable 2 = Good	2