



## Test Results

ISO/FDIS 7176/19  
30<sup>th</sup> August 2001

### Section 5.2– Frontal Impact Performance Requirements

Wheelchair: 9TRL Service (14.5kg) Occupant: Hybrid II 50 <sup>th</sup> Percentile (75kg)	RESULTS
<b>5.2.1 During the Test</b>	
a). Horizontal ATD and wheelchair excursion limits as per limits taken from Table 1:-	
Xwc Was the horizontal movement of the test wheelchair P- Point less than 200 mm. ( $\pm 5$ mm)	PASS 76mm
Xknee Was the horizontal movement of the dummy knee less than 375 mm. ( $\pm 5$ mm)	PASS 268mm
Xheadf Was the horizontal movement of the dummy head less than 650 mm. ( $\pm 5$ mm)	PASS 482mm
Xheadr Was the horizontal movement of the dummy head less than 400 mm. ( $\pm 5$ mm)	Not Measured
b). Was the ratio X knee/X wc $> 1.1$	PASS 3.5:1
c). Not Measured	
d). Did the batteries of powered wheelchairs, or their surrogate parts:-	
i). move outside of the wheelchair footprint	PASS
ii). move into the wheelchair user's space	PASS
<b>5.2.2 Post Test</b>	
a). Did the wheelchair remain upright on the test platform	PASS
Did the ATD remain in a seated posture in the test wheelchair with a torso angle less than $45^\circ$ to the vertical	PASS
b). Did the wheelchair securement points show visible signs of material failure	PASS
c). Did any components of a mass greater than 100g become detached from the wheelchair	PASS
d). Did any occupant contactable components fragment or separate with an edge of less than 2mm	PASS
e). Did any primary load carrying components of the wheelchair show any visible signs of failure	PASS
f). Did any 'tilt in space' locking mechanisms show signs of failure	PASS
g). Was the ATD released without the use of tools	PASS
h). Was the wheelchair released from the restraint system without the use of tools	PASS
i). Was the average decrease of H-Point height relative to the wheelchair platform less than 20% of the pre-test height.	PASS 1.2%
Has the wheelchair satisfied the Dynamic Test requirements of ISO/FDIS 7176/19 of 30 <sup>th</sup> August 2001	PASS