

# DYNAMIC RESTRAINT TEST FACILITY TEST REPORT

test date: 5 June 2000  
TRL reference number: IG00036 (T0715, 749)  
report date: 26 June 2000  
author: A Assejev  
customer: Invacare Ltd  
customer reference: PO3826


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Approvals

Project Manager

QARO



Requirements of Section 5			Result
5.3.1.a	Was the horizontal movement of the:		(i) wheelchair (X wc) < 200mm? Yes 120
			(ii) dummy knee (X knee) < 375mm? Yes 280
			(iii) dummy head (X head) < 650mm? Yes 520
5.3.1.d	Was the ratio of X knee/X wc > 1.1?		Yes 2.3
	(i)	Did the batteries move completely outside of the wheelchair footprint? <i>Note: Both batteries moved from their pre-test position but stayed attached to wheelchair.</i>	No
	(ii)	Did the battery contact the back of the ATD legs?	No
5.3.2.a	(i)	Did the wheelchair remain in an upright position on the test platform?	Yes
	(ii)	Did the ATD remain in the wheelchair with its torso at an angle of less than 45 deg when viewed from any direction?	Yes Front = 13° Side = 30°
5.3.2.b	Did the wheelchair securement points show visible signs of material failure?		No
5.3.2.c	For manual tiedowns: Did the securement points show any deformation or distortion to prevent manual disengagement and removal tiedown end fittings?		No
5.3.2.d	Did any components, fragments or accessories with a mass in excess of 100gm completely detach from the wheelchair?		No
5.3.2.e	Did any fragmented or separated component that may contact the occupant produce sharp edges with a radius less than 2mm?		No
5.3.2.f	Was the ATD removed from the wheelchair without the use of tools?		Yes
5.3.2.g	Was the wheelchair released from the tiedown system without the use of tools?		Yes
5.3.2.h	Was the decrease of the mean H-point height < 20%		Yes

**Conclusion:** The system met the requirements of Sections 5.3.1 and 5.3.2 and thus gave a satisfactory impact performance.

Pass/Fail:	PASS
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Analysed by:	A. Ameyor	Date:	27/06/2003
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