# **Crash Tests**

# New Car SafetyDAIHATSU SIRION (LHD)2005 on Driver+side & head airbags



Occupant Protection Score 2

28.55 out of 37

Variant: SPORTS 5 DR HATCHEng: 1.3 litreKerb weight: 940 kgCategory: LIGHT CARVehicles built: 2005Test by Euro NCAP

**Important note**: The *left-hand-drive* European model *with side airbags* was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

#### **Model History and Safety Features**

The tested model of Daihatsu Sirion was introduced in Australia during 2005.

Dual front airbags are standard in Australia. ABS/EBD brakes, side airbags and head-protecting side curtains are available with an optional safety pack. *The vehicle tested by Euro NCAP had side-thorax airbags but no curtain*. Advanced seat belt reminders are fitted to both front seats in Europe and the above score includes two bonus points for this feature.

The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pre-tensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point seat belt.

# **OCCUPANT PROTECTION: 4 Stars**

The Daihatsu Sirion scored 10.55 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver and weak for the passenger. There was a slight risk of serious chest injury for the driver and passenger.

The vehicle scored 16 out of 16 in the side impact crash test. The European vehicle was not eligible for a pole test.

# FRONTAL OFFSET CRASH TEST

*Body region scores out of 4 points each*: Head/neck 4 pts, chest 2.94 pts, upper legs 1.25 pts, lower legs 2.36 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 62 mm and upwards 15 mm. The steering wheel hub moved forwards 11mm, downwards 10mm and sideways 1 mm. The front ("A") pillar moved 41 mm rearwards. All doors remained closed during the crash.

Airbags cushioned the head of the driver and passenger and each contact was stable. Steering column and dash components were a potential source of injury for the driver's knees. Dash and centre console components were a potential hazard to the passenger's knees.

# SIDE IMPACT CRASH TEST

*Body region scores out of 4 points each*: Head 4 pts, chest 4 pts, abdomen 4 pts, pelvis 4 pts.

The Australian model with optional side curtains could be expected to also earn 16 points in this test.



Offset crash test at 64km/h

The European vehicle was not eligible for a pole impact test since it did not have head-protecting side airbags. This test can earn eligible vehicles an extra two points.

### **INJURY MEASUREMENTS**

Refer to the inforn sheet "How the te done"		Offset Cr at 64 (v4	km/h	Side Impact Crash Test at 50km/h (v4.1)
		Driver	Passn	Driver
Head HIC		549	367	84
Acceleration (g for 3ms)		56.0	42.7	24.6
Neck - Shear (kN)		0.61	1.00	-
Tension (kN)		0.48	1.34	-
Extension (Nm)		33.3	18.0	-
Chest Accln (g for 3ms)		-	-	I
Compression (mm)		29.40	22.76	21.58
Viscous criterion (m/s)		0.13	0.10	0.17
Abdomen - Force	(kN <b>)</b>	-	-	0.540
Pelvis - Force	(kN)	-	-	2.890
Upper legs Force	Left	0.08	1.47	
(kN)	Right	2.22	0.07	
Knee displ (mm)	Left	0.08	7.69	
	Right	6.88	0.02	
Lower legs Force Left		1.61	1.33	
(kN)	Right	2.85	1.91	
Index (Upper/Low) Left		0.42 /0.77	0.43 /0.25	
	Right	0.38 /0.22	.23/.21	

#### Bonus points (maximum 5)

Pole Test: Not eligible (Europe) Seat belt reminders: 2 (Europe)

Modifiers - offset test scores	
Head	No deduction
Chest	No deduction
Upper leg Variable & conc. loading	2 pt deduction
for driver (L & R) & passenger (L)	
Lower leg	No deduction
Foot score	Score 4 points
Modifiers - side impact test scores	
Chest	No deduction

# **PEDESTRIAN PROTECTION RATING (v4.1)**

Child head impacts	7	Upper leg impacts	Zero
Adult head impacts	5.74	Lower leg impacts	2.25
Total (out of 36)	14.99	***	X



# December 2005

Published by New Car Assessment Program PO Box 1555 Canberra ACT Australia 2601

sirion05.doc issued 1/12/2005