

# Crash Tests

## New Car Safety

### DAIHATSU SIRION

From mid 2000

Dual airbags

#### Overall Evaluation



Overall score

22.67 out of 34

Variant: 5 Door Hatch. Engine: 3 Cyl. 1 litre.  
Kerb weight: 850 kg Category: SMALL CAR  
Vehicles built May-00  
Offset VIN: JDAM100S000539234

#### Safety features

Dual airbags are standard equipment.

The front seat belts have pretensioners to remove slack in the event of a severe crash. 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.

Hazard warning lights activated during the side impact crash.

#### OVERALL EVALUATION : 3 Stars

The DAIHATSU SIRION performed well in the side impact test (score 14.23 out of 16). Performance in the offset crash test was adequate (score 8.44 out of 16). Dual airbags helped to protect the driver and passenger from serious head injury in the offset test but protection from serious leg injury was poor for the driver.

#### FRONTAL OFFSET CRASH TEST

The passenger compartment held its shape well in the offset crash test, except there was too much footwell intrusion and brake pedal movement. The front part of the driver's floor was pushed rearwards 21cm. The brake pedal moved rearwards by 25cm. The dash moved 13cm towards the driver. The width of the driver's doorway shortened by just 6cm. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door, after the lock mechanism had been manipulated. The other doors opened easily.

The airbag cushioned the head of the driver. The head started to roll off the side of the airbag but recovered. The back of the driver's head hit the centre pillar during rebound. The driver's knee hit the dash and brackets on either side deformed to absorb some of the impact. Although not hit by the dummy, the ignition switch is located in the knee impact zone and is the reason for a one point upper leg modifier. The passenger's head was cushioned by the airbag. The passenger's knees hit the glove box and dash.

#### SIDE IMPACT CRASH TEST

The centre pillar and the side doors were pushed inwards substantially. The roof and floorpan remained in good shape.

The back of the driver's head glanced the centre pillar and the top of the door then rebounded. Rebound movement was well controlled.

The 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, giving a maximum possible overall score of 34 points.



Offset crash test at 64km/h

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
	Driver	Passn	Driver
Head HIC	637	232	111
Acceleration (g for 3ms)	72.69	36.1	46.7
Neck - Shear (kN)	0.5	0.6	-
Tension (kN)	2.6	1.24	-
Extension (Nm)	37.6	36.5	-
Chest Accln (g for 3ms)	59.8	33.19	-
Compression (mm)	35.6	28.2	20.5
Viscous criterion (m/s)	0.2	0.114	0.3
Abdomen - Force (kN)	-	-	1.499
Pelvis - Force (kN)	-	-	3.327
Upper legs Force	Left	2.34	0.35
(kN)	Right	1.67	1.4
Knee displ (mm)	Left	3.9	-
	Right	7.4	6.1
Lower legs Force	Left	1.72	1.88
(kN)	Right	2.03	1.44
Index (Upper/Low)	Left	0.39/0.4	0.43/0.14
	Right	0.52/1.32	0.31/0.15

#### Offset test modifiers:

Head		None
Chest		None
Upper leg	Variable contact,	R:1 pt
penalty		
Tibia score	Brake pedal movement up	0.5 pt penalty
Foot score	Brake pedal movement back	Zero score

#### PEDESTRIAN RATING: ★★

2 Stars (39% score for child and adult head & leg injury)



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