

# Crash Tests

## New Car Safety

### DAEWOO KALOS

2003 on

Dual front airbags

#### Overall Evaluation



#### Overall score

17.64 out of 37

Variants: 5 DR HATCH

Eng: 1.5L litre.

Kerb weight: 1080 kg

Category: SMALL CAR

Vehicles built: 7/03

#### Model History and Safety Features

The tested model of DAEWOO KALOS was introduced in Australia during 2003.

Dual front airbags are standard equipment. ABS brakes are available on the Limited Edition variant.

#### OVERALL EVALUATION : 3 Stars

The DAEWOO KALOS scored 5.90 out of 16 in the offset crash test. The passenger compartment held its shape reasonably well in the offset crash test, except for pedal and footwell intrusion. Protection from serious lower leg injury was poor for the driver. Chest protection was marginal for the driver.

The vehicle scored 11.73 out of 16 in the side impact crash test. Protection from serious chest injury was marginal for the driver.

#### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 1.67pts, upper legs 0.23pts, lower legs 0pts.

The passenger compartment held its shape reasonably well in the offset crash test. However, the front part of the driver's floor was pushed rearwards 170mm. and the brake pedal moved rearwards by 273mm and upwards 136mm, relative to the driver's seat. The dash moved 72mm towards the driver. The steering wheel hub moved rearwards 79mm, downwards 39mm and sideways 6mm, relative to the driver's seat. The front ("A") pillar moved 91mm rearwards. The roof buckled upwards above the driver and the width of the driver's doorway shortened by 81mm. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

The airbag cushioned the head of the driver. The head rolled to the side but contact was stable. During rebound the driver's head came partially out of the window. Steering column components and a metal plate behind the fascia were potential sources of injury for the driver's knees. The passenger's head was cushioned by the airbag.

#### SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4pts, chest 0.2pts, abdomen 3.55pts, pelvis 3.99pts.

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.



Offset crash test at 64km/h

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4.0)		Side Impact Crash Test at 50km/h (v4.0)
	Driver	Passn	Driver
Head HIC	382	360	173
Acceleration (g for 3ms)	45.9	44.2	57.7
Neck - Shear (kN)	0.11	0.50	-
Tension (kN)	1.62	1.56	-
Extension (Nm)	21	15.7	-
Chest Accln (g for 3ms)	41.9	29.8	-
Compression (mm)	38.3	30	41
Viscous criterion (m/s)	0.26	0.13	0.9
Abdomen - Force (kN)	-	-	1.17
Pelvis - Force (kN)	-	-	3.01
Upper legs Force			
(kN) Left	1.75	0.75	
(kN) Right	7.45	1.89	
Knee displ (mm)			
Left	0.71	0.1	
Right	1.15	2.06	
Lower legs Force			
(kN) Left	1.48	1.67	
(kN) Right	2.49	1.18	
Index (Upper/Low)			
Left	0.25/0.17	0.31/0.18	
Right	0.38/2.03	0.26/0.11	

#### Bonus points (maximum 5)

Pole Test: Not eligible

Seat belt reminders: Not eligible

#### Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg Variable & conc. loading	2 pt deduction L
Upper leg Conc. loading	1 pt deduction R
Lower leg Pedal upwards	1pt deduction
Foot score Pedal rearwards	Score zero points

#### Pedestrian rating (v4.0)



8.4 points out of 36.

Child head impacts 0pts; adult head impacts 5pts; upper leg 3.4pts and lower leg impacts 0pts.



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