

# Crash Tests

## New Car Safety

### Kia Sorento

02/2007 on 09/2009 - Dual Frontal

#### Overall Evaluation



#### Overall Score

24.52 out of 37

Variant: GLS Left Hand Drive

Engine: 2.5 litre diesel  
Category: Large SUV

The diesel left-hand-drive European model 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 Kia Sorento was introduced in Australia during 2005. This rating applies to models built from 2007.

Dual front airbags are standard equipment. Antilock brakes (ABS) with electronic brakeforce distribution (EBD) are also standard. Side airbags, head-protecting side curtains and electronic stability control (ESC) are standard on the EX Limited variant. The EX variant also has ESC.

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. Pretensioners 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 (lap) seat belt.

#### Overall Evaluation: 4

4 Stars. The Sorento scored 8.52 out of 16 in the offset crash test. The passenger compartment was badly damaged. Protection from serious leg injury was marginal for the driver and a passenger. Passenger chest protection was also marginal. The vehicle scored 16 out of 16 in the side impact crash test.

#### Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 3 pts, chest 1.9 pts, upper legs 2 pts, lower legs 1.62 pts.

The passenger compartment was badly damaged in the offset crash test but not quite enough to lose points. The brake pedal moved rearwards by 113 mm and upwards 19 mm. The steering wheel hub moved 3 mm rearward, 28 mm upward and 3 mm sideways. The front ("A") pillar moved 44 mm rearwards. All doors remained closed during the crash. After the crash the driver's door could be opened with high manual effort.

The airbag cushioned the head of the driver but it bottomed out. Steering column and dash components were a potential source of injury for the driver and passenger knees. The passenger's head was cushioned by the airbag.

#### 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 side impact test simulates a small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the Sorento. Experience shows that such vehicles can be expected to perform well in this test and the Sorento scored full marks.

#### Pedestrian rating (v4)



Only part of the bonnet provided good protection for an adult head impact. All other test points were poor.

Child head impacts	Zero
Adult head impacts	3.170
Upper leg impacts	Zero
Lower leg impacts	Zero
Total (out of 36)	3.170

Offset crash test at 64km/hr



#### Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4)		Side Impact Crash Test aa 50km/h (v4) Driver
	Driver	Passn	
Head			
- HIC	449	341	21
- Acceleration (g for 3ms)	57.1	44.3	23.2
Neck			
- Shear (kN)	0.46	0.77	
- Tension (kN)	1.64	1.11	
- Extension (Nm)	15.2	19.8	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	28.81	36.69	14.68
- Viscous Criterion (m/s)	0.12	0.14	0.06
Abdomen			
- Force (kN)			0.59
Pelvis			
- Force (kN)			0.47
Upper Legs Force (kN)			
- Left	2.59	3.43	
- Right	2.49	1.12	
Knee Displacement (kN)			
- Left	0.03	5.21	
- Right	0.4	5.98	
Lower Legs Force (kN)			
- Left	1.96	1.59	
- Right	5.57	2.22	
Index (Upper   Lower)			
- Left	0.55   0.41	0.33   0.3	
- Right	0.93   0.35	0.35   0.18	

#### Bonus points (maximum 5)

Pole Test: Not eligible due to lack of head-side airbags

Seat Belt Reminders: None

#### Modifiers for offset test scores

Head	Airbag bottomed out	1 pt deduction
Chest		No deduction
Upper leg	Variable & Conc. Loading for D & P	2 pt deduct. L & R
Lower leg		No deduction
Foot score	Footwell rupture & pedal rear	2.46 points
Structure		

#### Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



Version 1, Published on: 3/10/2008  
Published by  
New Car Assessment Program  
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