

Crash Tests

New Car Safety

Kia Sorento

03/2010 on 12/2012 - Frontal+Side+Head

Overall Evaluation



Overall Score

33.21 out of 37

Variant: Diesel 4WD (passenger SBR & driver dual pretension)

Engine: 2.2 diesel

Category: Large SUV

European EX 5 seat model tested.

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 2009. In 2010 a passenger seat belt reminder and a dual pretensioner on the driver seat were introduced on the Australian model. This 5-star ANCAP rating applies to diesel 4WD Sorentos with these added safety features.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to both front seats.

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: 5

5 Stars. The KIA SORENTO scored 13.25 out of 16 in the offset crash test. The passenger compartment held its shape well. All injury ratings were good or acceptable.

The vehicle scored 15.96 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver. A further two points were scored in the optional pole test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.27 pts, upper legs 3 pts, lower legs 2.98 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 77 mm and upwards 8 mm. The steering wheel hub moved 15mm forward, 10mm downward and 17 mm sideways. The front ("A") pillar moved 9 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 and contact was stable. Steering column components were a potential source 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 4 pts, chest 3.96 pts, abdomen 4 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

Pedestrian rating (v4.2)



Pedestrian protection was generally poor. The rear of the bonnet and centre of the bumper provided good protection.

Child head impacts	4.11
Adult head impacts	6.07
Upper leg impacts	Zero
Lower leg impacts	5.72
Total (out of 36)	15.90

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test at 50km/h (v4.2)
	Driver	Passn	Driver
Head			
- HIC	404	343	30
- Acceleration (g for 3ms)	47.9	42.7	20.7
Neck			
- Shear (kN)	0.29	0.65	
- Tension (kN)	1.57	0.9	
- Extension (Nm)	12.3	2.9	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	27.09	16.87	22.21
- Viscous Criterion (m/s)	0.11	0.09	0.19
Abdomen			
- Force (kN)			0.64
Pelvis			
- Force (kN)			0.82
Upper Legs Force (kN)			
- Left	0.08	1.7	
- Right	2.29	0.3	
Knee Displacement (kN)			
- Left	0	3.4	
- Right	1.3	0.6	
Lower Legs Force (kN)			
- Left	1.53	2.36	
- Right	2.25	1.61	
Index (Upper Lower)			
- Left	0.52 0.2	0.28 0.26	
- Right	0.63 0.29	0.21 0.2	

Bonus points (maximum 5)

Pole Test: 2

Seat Belt Reminders: 2

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	Variable contact
Lower leg	0.5pt L, 1 pt R
Foot score	No deduction
Structure	3.83

Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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