

Crash Tests

New Car Safety

Hyundai Sonata

06/2006 on 08/2010 - Frontal+Side

Overall Evaluation



Overall Score

Variant: GLS 4 Dr Sedan

26.52 out of 37

Engine: 2.4 litre

Category: Medium Car

The 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 Hyundai Sonata was introduced in Australia during 2005.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS) with electronic brake distribution (EBD) are also standard. Electronic stability control (ESC) is optional on the SLX variant and standard on other Australian and all New Zealand variants. Intelligent seat belt reminders are fitted to both front seats.

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 (lap) seat belt.

Overall Evaluation: 4

The Hyundai Sonata scored 9.02 out of 16 in the offset crash test. The passenger compartment held its shape reasonably well, except for the firewall and footwell deformation. Protection from serious chest, leg and foot injury was marginal for the driver.

The vehicle scored 13.5 out of 16 in the side impact crash test. There was a moderate risk of serious chest injury for the driver. A further two points were earned in the optional pole test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4pts, chest 2.36pts, upper legs 0.22pts, lower legs 2.44pts.

The passenger compartment held its shape reasonably well in the offset crash test. The clutch pedal moved rearwards by 139mm and downwards 16mm. The steering wheel hub moved rearwards 44mm, downwards 42mm and sideways 1mm. The front ("A") pillar moved 59mm rearwards. All doors remained closed during the crash.

After the crash tools were required to open the driver's door. The airbag cushioned the head of the driver and contact was stable. Steering column and dash components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag. Dash and glove box components were a knee injury hazard for the passenger.

Side Impact Crash Test

Body region scores out of 4 points each: Head 4pts, chest 2.3pts, abdomen 3.2pts, pelvis 4pts.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

Pedestrian rating (v4.1)



Child head impacts: 3.86.
Adult head impacts: 8.
Upper leg impacts: zero.
Lower leg impacts: zero.
Total (out of 36): 11.86

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passn	Driver
Head			
- HIC	202	440	51
- Acceleration (g for 3ms)	37.5	54.5	22.9
Neck			
- Shear (kN)	0.54	0.75	
- Tension (kN)	0.96	0.91	
- Extension (Nm)	12.7	15.2	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	33.47	28.66	29.5
- Viscous Criterion (m/s)	0.12	0.12	0.34
Abdomen			
- Force (kN)			1.3
Pelvis			
- Force (kN)			1.43
Upper Legs Force (kN)			
- Left	3.6	0	
- Right	3.3	4.17	
Knee Displacement (kN)			
- Left	10	0	
- Right	2	6.3	
Lower Legs Force (kN)			
- Left	2.52	2.17	
- Right	0.86	1.64	
Index (Upper Lower)			
- Left	0.57 0.48	0.3 0.2	
- Right	0.34 0.36	0.36 0.23	

Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: Fitted to both front seats - 2 points

Modifiers for offset test scores

Head		no deduction
Chest		no deduction
Upper leg	Variable & conc. loading for driver & passenger	2 pt deduction L & R
Lower leg		no deduction
Foot score	Pedal rearward	2.44 pts
Structure		

Modifiers for side impact test scores

Head		
Chest	T12 loads	0.2 pt deduction
Upper leg		
Lower leg		
Foot score		
Structure		



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