

Crash Tests

New Car Safety

Hyundai Sonata

08/1998 on 04/2000 - None

Overall Evaluation



Overall Score

Variant: GLE Sedan

9.8 out of 34

Engine: 2 Litre 4 Cyl

Category: Medium Car

Model History and Safety Features

Dual airbags are optional for about \$1200. Airbags were not fitted to the Australian test vehicles but provided good protection from serious head injury for the driver in a US offset crash test of an airbag-equipped Sonata.

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. Lap/sash (3 point) seat belts are fitted to all seats, including the centre rear seat.

Overall Evaluation: 2

The Hyundai Sonata did not perform well in the offset crash test, scoring zero points. The passenger compartment was substantially deformed. The driver was poorly protected from serious injury to the head, chest and legs.

The vehicle performed better in the side impact crash (9.8 points out of 16) but there was a high risk of life threatening chest injury for the driver.

Frontal Offset Crash Test

The passenger compartment was substantially deformed in the offset crash test. The front part of the driver's floor was pushed rearwards 28cm. It was severely folded and separated from the sill. The brake pedal moved rearwards by 30cm. The dash moved 20cm towards the driver. The roof buckled at the top of the windscreen pillar and the width of the driver's doorway shortened by 21cm. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

The driver's head hit the steering wheel and dash. The driver's knee hit the dash, which disintegrated. The passenger's head did not hit anything. 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 driver's seat was pushed sideways but the anchorages held.

The driver's head hit the centre pillar then rebounded. The head rocked severely to the left during rebound.

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.

Pedestrian rating (v0)

(0 stars)

Not assessed

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v2)		Side Impact Crash Test aa 50km/h (v2)
	Driver	Passn	Driver
Head			
- HIC	990	732	177
- Acceleration (g for 3ms)	91.9	75.6	54.8
Neck			
- Shear (kN)			
- Tension (kN)	2.2	1.8	
- Extension (Nm)			
Chest			
- Acceleration (g for 3ms)	42.1	38.8	
- Compression (mm)	37.2	39.6	37.7
- Viscous Criterion (m/s)	0.2	0.2	0.49
Abdomen			
- Force (kN)			2.1
Pelvis			
- Force (kN)			3.1
Upper Legs Force (kN)			
- Left	11.4	0.5	
- Right	6.8	1.8	
Knee Displacement (kN)			
- Left	0	0	
- Right	6.6	3	
Lower Legs Force (kN)			
- Left	5.3	2	
- Right	1.4	2.1	
Index (Upper Lower)			
- Left	1.45 1.82	0.25 0.3	
- Right	0.7 0.98	0.33 0.17	

Bonus points (maximum 5)

Pole Test: Zero points

Seat Belt Reminders: None fitted - zero points

Modifiers for offset test scores

Head	steering wheel movement	1pt penalty
Chest	A-Pillar movement	2pt penalty
Upper leg		No deduction
Lower leg	Brake pedal movement	1pt penalty
Foot score	Brake pedal movement	Zero score
Structure		No deduction

Modifiers for side impact test scores

Head	Not assessed
Chest	Not assessed
Upper leg	Not assessed
Lower leg	Not assessed
Foot score	Not assessed
Structure	Not assessed



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