

# Crash Tests

## New Car Safety

### Hyundai Elantra

07/2000 on 09/2003 - Dual Frontal

#### Overall Evaluation



**Overall Score**  
Variant: 4 Dr Sedan

**20.05 out of 34**  
Engine: 1.6 Litre, 4 cyl  
Category: Small Car

The left-hand-drive European model was tested by EuroNCAP. 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 Elantra was introduced in Australia during 2000. EuroNCAP tested the 2001 year model.

Dual front airbags are standard equipment.

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. These seat belts also have load limiters.

The centre rear seat has a three point seat belt. This provides better protection than a two point seat belt.

#### Overall Evaluation: 3

The Hyundai Elantra scored 6.09 out of 16 in the offset crash test. There was a moderate risk of serious injury for the chest and legs of the driver.

The vehicle scored 13.96 out of 16 in the side impact crash test. There was a slight risk of serious abdominal injury for the driver.

#### Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 3pts, chest 1.74pts, upper legs 1.23pts, lower legs 0.12pts.

The passenger compartment held its shape reasonably well, except for footwell intrusion and pedal movement. The brake pedal moved rearwards by 197mm and upwards 83mm. The steering wheel hub moved rearwards 55mm and upwards 16mm. The front ("A") pillar moved 42mm rearwards. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door.

The airbag deployed the head and chest of the driver hit the steering wheel. Components within the knee impact zone were found to be hazardous to the driver's knees. There was a slight risk of serious injury to the chest and lower legs of the passenger.

#### Side Impact Crash Test

Body region scores out of 4 points each: Head 4pts, chest 4pts, abdomen 2.96pts, pelvis 4pts.

There was good protection from serious injury for the head, chest and pelvis of the driver. Abdomen protection was adequate. The rear door on the struck side opened during the crash and this resulted in a one point penalty.

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 (v2)



16.18 points out of 36 (44.9%).

Child head impacts 9.19pts;

Adult head impacts 6.32pts;

Upper leg 0.67pts and lower leg impacts zero pts.

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
	Driver	Passn	
Head			
- HIC	613.8	268.1	66.5
- Acceleration (g for 3ms)	60.05	43.12	41.37
Neck			
- Shear (kN)	0.38	0.97	
- Tension (kN)	1.67	0.12	
- Extension (Nm)	10.66	20.21	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	30.81	30.48	21.86
- Viscous Criterion (m/s)	0.29	0.14	0.15
Abdomen			
- Force (kN)			1.39
Pelvis			
- Force (kN)			1.57
Upper Legs Force (kN)			
- Left	4.82	3.32	
- Right	3.11	0.46	
Knee Displacement (kN)			
- Left	4.23	4.2	
- Right	0.36	0.01	
Lower Legs Force (kN)			
- Left	1.14	2.15	
- Right	2.91	2.32	
Index (Upper   Lower)			
- Left	0.34   0.78	0.27   0.19	
- Right	0.81   0.7	0.4   0.34	

#### Bonus points (maximum 5)

Pole Test: Zero points

Seat Belt Reminders: None fitted - zero points

#### Modifiers for offset test scores

Head	contact steering wheel	1pt deduction
Chest	contact steering wheel	1pt deduction
Upper leg	Variable & conc. loading	2 pt penalty L & R
Lower leg	Brake pedal upward movement	0.69 pt penalty
Foot score	Brake pedal rear movement	Score 0.12 pts
Structure		No deduction

#### Modifiers for side impact test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	No deduction
Structure	Door opened during crash test 1 pt penalty



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