

Crash Test Results

New Car Safety

HYUNDAI ELANTRA

July 2007 on Front+side+head airbags



Offset crash test at 64km/h



ANCAP Occupant Protection
Rated ★★★★★

Occupant Protection Score 20.76 out of 37

Variant: SX/SLX

Eng: 2 litre

Kerb weight: 1290 kg

Category: SMALL CAR

Vehicles built: 8/07 and 01/08

Model History and Safety Features

The tested model of Hyundai Elantra was introduced in Australia during 2006. This result applies to Elantras with an upgraded rear door mechanism, introduced in July 2007, and head-protecting side curtains.

Dual front airbags and antilock brakes (ABS) with electronic brake distribution (EBD) are standard. Side airbags and head-protecting side curtains are optional on the SX and standard on the SLX and Elite in Australia. They are standard on all variants in New Zealand. Electronic stability control (ESC) is standard on the Elite and optional on other variants in Australia. ESC became standard on all New Zealand variants during 2007.

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.

OCCUPANT PROTECTION: 3 Stars

The Elantra scored 7.81 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was poor for the driver. Chest protection was marginal.

The vehicle scored 12.95 out of 16 in the side impact crash test. There was a moderate risk of serious chest and abdomen injury for the driver.

FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.21 pts, upper legs zero pts, lower legs 1.6 pts.


The passenger compartment held its shape well in the offset crash test. The accelerator pedal moved rearwards by 65 mm and downwards 12mm. The steering wheel hub moved 22 mm rearward, 5mm downward and 48 mm sideways. The front ("A") pillar moved 24 mm rearwards. All doors remained closed during the crash. After the crash the driver's door opened with high manual effort. 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 and contact was stable.

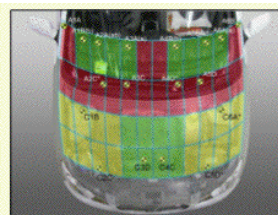
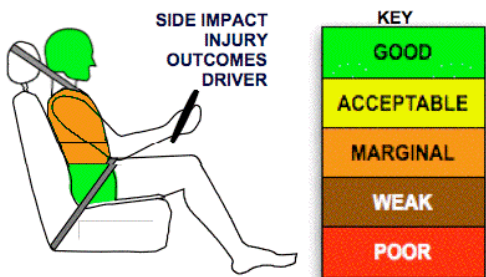
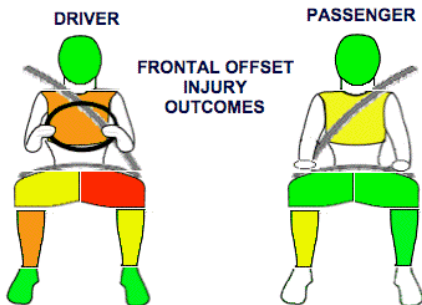
SIDE IMPACT CRASH TEST (v4.1)

Body region scores out of 4 points each: Head 4 pts, chest 1.35 pts, abdomen 2.64 pts, pelvis 4 pts.

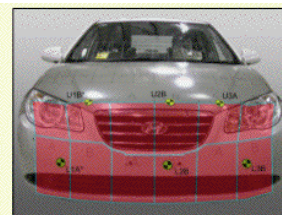
The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. However, the manufacturer decided not to go ahead with this test, which can earn a further two points. A separate ANCAP rating is available for the Elantra without head-protecting side curtains.

PEDESTRIAN PROTECTION RATING (v4.1)

PEDESTRIAN PROTECTION		
 ANCAP Rated ★★★★★	Child head impacts	4.5
	Adult head impacts	4
	Upper leg impacts	Zero
	Lower leg impacts	Zero
	Total (out of 36)	8.50



Child and adult head impact



Adult leg impact (upper and full legforms)

pass marginal fail

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elantra08c.doc

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ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - HYUNDAI ELANTRA WITH SIDE CURTAINS

July 2007 on

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passenger	Driver
Head HIC	471	388	42
Acceleration (g for 3ms)	59.8	59.6	21.4
Neck - Shear (kN)	0.45	0.45	-
Tension (kN)	1.75	0.73	-
Extension (Nm)	29.6	41.6	-
Chest Accln (g for 3ms)	46.70	30.90	-
Compression (mm)	34.50	27.10	24.20
Viscous criterion (m/s)	0.16	0.10	0.12
Abdomen - Force (kN)	-	-	1.50
Pelvis - Force (kN)	-	-	1.79
Upper legs Force (kN)			
Left	3.44	0.46	
Right	3.76	3.60	
Knee displ (mm)			
Left	13.48	0.00	
Right	2.37	0.12	
Lower legs Force (kN)			
Left	1.51	1.90	
Right	2.23	3.30	
Index (Upper/Low)			
Left	0.68 /0.30	0.30 /0.31	
Right	0.29 /0.94	0.59/0.21	

Bonus points (maximum 5)

Pole Test: Eligible but not tested

Seat belt reminders: None (see table below for details)

Modifiers - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg Concentrated loading	1 pt deduction Left & Right
Lower leg	No deduction
Foot score	Score 4 points

Note: Steering column and pedal movements are measured relative to the driver's seat.

Modifiers - deductions from side impact test scores

Chest T12 load	1.28 pt deduction
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Safety features

These specifications are subject to change. Please check with manufacturer for the latest specifications.

Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution	S/S
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	O (S NZ)
Side airbags, front seats - chest protection	O (S NZ)	3 point centre rear seat belt	S
Side airbags, front seats - head protection	O (S NZ)	Active head restraints - front seats	S
Side airbags, rear seats - head protection	O (S NZ)	Intelligent seat belt reminder - driver	X
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	X
Front seat belt pretensioners	S	Rear seat belt status indicator	X

Key:

S = standard on all variants

O = optional on base variant. May be standard on higher variants

V= not available on base variant but standard or optional on higher variants

X = not available on any variant

