

Crash Tests

New Car Safety

Hyundai Tucson

07/2006 on 12/2010 - Frontal+Side+Head

Overall Evaluation



Overall Score

29.24 out of 37

Variant: Elite

Engine: 2.2 Litre Diesel

Category: Compact SUV

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 Hyundai Tucson was introduced in Australia during 2006. The Australian model has a 2.7 litre petrol engine.

Dual front airbags and ABS/EBD brakes are standard equipment. Side airbags and head-protecting side curtains are standard on the Elite variant but are not available on the base variant. 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 seat belt.

Overall Evaluation: 4

The Tucson scored 11.24 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest and leg injury was marginal for the driver. Leg protection was also marginal for the passenger.

The vehicle scored 16 out of 16 in the side impact crash test. A further 2 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 2.61 pts, upper legs 2 pts, lower legs 2.62 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 116 mm and upwards 30 mm. The steering wheel hub moved rearwards 21 mm, downwards 3mm and sideways 16 mm. The front ("A") pillar moved 3 mm rearwards. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door.

The airbag cushioned the head of the driver and contact was stable. Dash and steering column components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag. Dash and centre console components were a potential source of injury for the passenger's knees.

Side Impact Crash Test

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

This test simulates a fairly small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the Tucson. Such vehicles can be expected to perform relatively well in this particular side impact test.

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	Zero
Adult head impacts	4
Upper leg impacts	Zero
Lower leg impacts	Zero
Total (out of 36)	4

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 aa 50km/h (v4.1)
	Driver	Passn	Driver
Head			
- HIC	280	230	35
- Acceleration (g for 3ms)	43.8	37.6	19.9
Neck			
- Shear (kN)	0.41	0.59	
- Tension (kN)	1.17	0.79	
- Extension (Nm)	18.7	15.8	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	31.7	23.6	19.2
- Viscous Criterion (m/s)	0.14	0.12	0.15
Abdomen			
- Force (kN)			0.7
Pelvis			
- Force (kN)			0.69
Upper Legs Force (kN)			
- Left	2.67	2.47	
- Right	3.12	0.78	
Knee Displacement (kN)			
- Left	0	4.45	
- Right	0	1.31	
Lower Legs Force (kN)			
- Left	1.05	2.48	
- Right	1.76	2.41	
Index (Upper Lower)			
- Left	0.3 0.71	0.31 0.18	
- Right	0.55 0.31	0.25 0.18	

Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: None fitted - zero points

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	Variable & concentrated loading
Lower leg	No deduction
Foot score	
Structure	

Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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