

Crash Tests

New Car Safety

Hyundai iMax

03/2009 on 01/0001 - Dual Frontal

Overall Evaluation



Overall Score

Variant: Van

25.81 out of 37

Engine: 2.4 Petrol

Category: MPV

Model History and Safety Features

The Hyundai iMax was introduced in Australia during 2008. This rating applies to vehicles with improved structural design, built from March 2009. The offset crash test of the van variant was conducted by the South Korean government test organisation KATRI, under ANCAP supervision. ANCAP was provided with evidence to show that the iMax has comparable front occupant protection to the van. The rating also applies to the diesel variant.

Dual front airbags are standard equipment. Antilock brakes (ABS) with electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Pretensioners are fitted to the outboard front seat belts to reduce slack in the event of a crash. 3-point seat belts are fitted to all seating positions.

Overall Evaluation: 4

4 Stars. The iMax scored 9.81 out of 16 in the offset crash test. The passenger compartment held its shape well, except for the dashboard support structure. Protection from serious chest injury was weak for the driver. The vehicle was awarded a default score of 16 out of 16 in the side impact crash test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 1.24 pts, upper legs 1.58 pts, lower legs 3 pts.

The passenger compartment held its shape reasonably well in the offset crash test. A box section that supports the dash separated from the a-pillar and the floor panel also separated from the a-pillar. The accelerator pedal moved rearwards by 96 mm. The clutch pedal moved downwards 8mm. The steering wheel hub moved 28 mm rearward, 14mm downward and 12 mm sideways. The front ("A") pillar moved 4 mm rearwards. All doors remained closed during the crash. After the crash the driver's door could be 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. The glove box support structure was a potential source of injury for the passenger's right knee.

Side Impact Crash Test

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

The side impact test normally used by ANCAP simulates a 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 iMax. Experience shows that such vehicles can be expected to perform well in this test so ANCAP has decided to award full score for these vehicles instead of conducting a crash test.

Pedestrian rating (v4.1)



A poor result, with all areas needing attention.

Child head impacts	Zero
Adult head impacts	2
Upper leg impacts	Zero
Lower leg impacts	Zero
Total (out of 36)	2

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	402	121	
- Acceleration (g for 3ms)	51.6	35.5	
Neck			
- Shear (kN)		0.74	
- Tension (kN)		1.59	
- Extension (Nm)		39.6	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	34.33	25.55	
- Viscous Criterion (m/s)	0.28	0.18	
Abdomen			
- Force (kN)			
Pelvis			
- Force (kN)			
Upper Legs Force (kN)			
- Left	0.62	0.2	
- Right	4.36	1.77	
Knee Displacement (kN)			
- Left	0.83	2.31	
- Right	1.75	2.71	
Lower Legs Force (kN)			
- Left	2.4	1.49	
- Right	1.08	1.61	
Index (Upper Lower)			
- Left	0.33 0.57	0.27 0.2	
- Right	0.3 0.62	0.37 0.32	

Bonus points (maximum 5)

Pole Test: Not eligible

Seat Belt Reminders: None

Modifiers for offset test scores

Head	No deduction
Chest	Loss of structure 1 pt deduction
Upper leg	Variable & Conc loading 2 pt deduct L&R Drv, 2 pt deduct R Passenger
Lower leg	No deduction
Foot score	No deduction
Structure	3 pts

Modifiers for side impact test scores

Head	Default score awarded
Chest	
Upper leg	
Lower leg	
Foot score	
Structure	



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