

Crash Tests

New Car Safety

Holden Epica

08/2008 on 01/0001 - Frontal+Side+Head

Overall Evaluation



Overall Score

Variant: Series II CDX sedan

27.41 out of 37

Engine: 2.5 litre

Category: Medium Car

Model History and Safety Features

The tested model of Holden Epica was introduced in Australia during 2007 and had seat-mounted side airbags with head protection. Inflatable side curtains and Electronic Stability Control (ESC) became standard on all versions from August 2008. The manufacturer provided evidence to ANCAP that the curtain-equipped Epica provides better protection in side impacts than the tested vehicle.

Dual front airbags, side airbags and curtains are standard equipment for the Series II. Antilock brakes (ABS) with electronic brakeforce distribution (EBD) and ESC are also standard. Intelligent seat belt reminders are fitted to the driver and front passenger seats for the Series II.

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.

Overall Evaluation: 4

4 Stars. The Holden Epica scored 8.91 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was weak for the driver and chest protection was marginal.

The vehicle scored 14.5 out of 16 in the side impact crash test. There was a slight risk of serious chest and pelvic injury for the driver. A further 2 points were earned in the optional pole test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 1.67 pts, upper legs 2.31 pts, lower legs 0.93 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 58 mm and upwards 39 mm. The steering wheel hub moved rearwards 75 mm, downwards 16mm and sideways 28 mm. The front ("A") pillar moved 33 mm rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

The airbag cushioned the head of the driver. The head rolled off the side of the airbag after the peak of the crash. Steering column components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag.

Side Impact Crash Test

Body region scores out of 4 points each: Head 4 pts, chest 2.82 pts, abdomen 4 pts, pelvis 3.68 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. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points and a 4 star rating.

Pedestrian rating (v4.1)



The Epica performed marginal to fair over much of the bonnet region and also in the full leg tests. Improvement is needed along the guards and windscreen support, as well as in the upper leg region.

Child head impacts	5.54
Adult head impacts	2.50
Upper leg impacts	Zero
Lower leg impacts	5.76
Total (out of 36)	13.80

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 at 50km/h (v4.1)
	Driver	Passn	Driver
Head			
- HIC	475	331	70
- Acceleration (g for 3ms)	60	45.1	42.7
Neck			
- Shear (kN)	0.4	0.54	
- Tension (kN)	1.74	1.18	
- Extension (Nm)	8.7	8.5	
Chest			
- Acceleration (g for 3ms)	47.3	34.3	
- Compression (mm)	38.33	29.4	27.9
- Viscous Criterion (m/s)	0.14	0.08	0.25
Abdomen			
- Force (kN)			0.71
Pelvis			
- Force (kN)			3.24
Upper Legs Force (kN)			
- Left	4.71	0.55	
- Right	2.72	2.8	
Knee Displacement (kN)			
- Left	0	0.15	
- Right	1.28	3.88	
Lower Legs Force (kN)			
- Left	3.82	2.62	
- Right	1.8	2.82	
Index (Upper Lower)			
- Left	1.09 0.41	0.27 0.24	
- Right	0.38 0.59	0.49 0.46	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat Belt Reminders: 2

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	1 pt deduct L
Lower leg	No deduction
Foot score	4 pts
Structure	measured relative to the driver's seat.

Note: Steering column & pedal movements are

Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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