

Crash Test Results

New Car Safety

HOLDEN EPICA SERIES II

Aug 2008 on Front+side+head airbags



Offset crash test at 64km/h

FRONTAL OFFSET CRASH TEST (v4.1)

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 (v4.1)

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 PROTECTION RATING

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.



ANCAP Occupant Protection
Rated ★★★★★

Occupant Protection Score 27.41 out of 37

Variant: CDX sedan

Eng: 2.5 litre

Kerb weight: 1540 kg

Category: MEDIUM CAR

Vehicles built: Feb & May 2007

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.

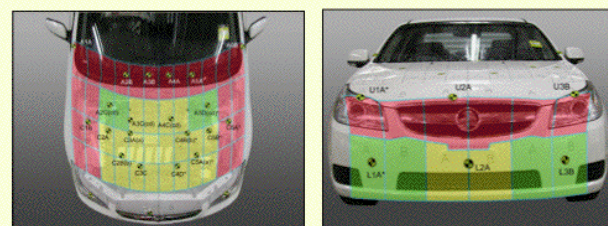
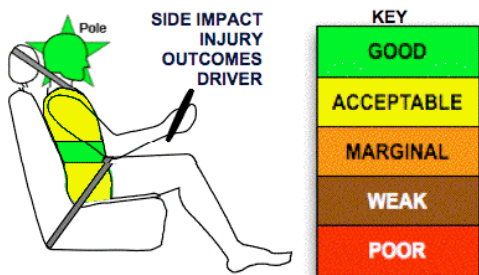
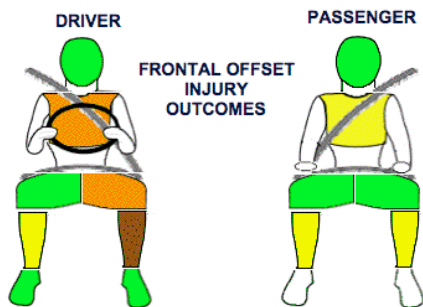
The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

OCCUPANT PROTECTION: 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.

PEDESTRIAN PROTECTION		
 <p>ANCAP Rated ★★☆☆☆ v4.1</p>	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



Child and adult head impact

Adult leg impact (upper and full legforms)

pass

marginal

fail

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epica08.doc

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ANCAP
Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - HOLDEN EPICA SERIES II - August 2008 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	475	331	70
Acceleration (g for 3ms)	60.0	45.1	42.7
Neck - Shear (kN)	0.40	0.54	-
Tension (kN)	1.74	1.18	-
Extension (Nm)	8.7	8.5	-
Chest Accln (g for 3ms)	47.300	34.300	-
Compression (mm)	38.33	29.40	27.90
Viscous criterion (m/s)	0.14	0.08	0.25
Abdomen - Force (kN)	-	-	0.710
Pelvis - Force (kN)	-	-	3.240
Upper legs Force (kN)			
Left	4.71	0.55	
Right	2.72	2.80	
Knee displ (mm)			
Left	0.00	0.15	
Right	1.28	3.88	
Lower legs Force (kN)			
Left	3.82	2.62	
Right	1.80	2.82	
Index (Upper/Low)			
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 - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg Conc. loading	1 pt deduction Left
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	No 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/Brake Assist	S/S/X
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S#
Side airbags, front seats - chest protection	S	3 point centre rear seat belt	S
Side airbags, front seats - head protection	S	Active head restraints - front seats	X
Side airbags, rear seats - head protection	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	S
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

ESC required by ANCAP for 5 star rating from 2008