

Crash Tests

New Car Safety

Holden Barina

09/2005 on 06/2007 - Dual Frontal

Overall Evaluation



Overall Score

Variant: 5 door hatch

14.9 out of 37

Engine: 1.6 Litre
Category: Small Car

Model History and Safety Features

The tested model of Holden Barina was introduced in Australia late in 2005.

Dual front airbags are standard equipment. ABS brakes are optional. Side airbags are not available in Australia.

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: 2

The Barina scored 4.39 out of 16 in the offset crash test. The passenger compartment structure was compromised. Protection from serious chest and leg injury was poor for the driver.

The vehicle scored 10.51 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

Body region scores out of 4 points each: Head/neck 3 pts, chest zero pts, upper legs 1.39 pts, lower legs zero pts.

The passenger compartment structure was compromised in the offset crash test. The brake pedal moved rearwards by 332 mm and upwards 110 mm. It was designed release in this type of crash to reduce leg injury risk, but failed to do so. The steering wheel column released by design and no displacement modifiers were applied. The front ("A") pillar moved 121 mm rearwards. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

The airbag cushioned the head of the driver but contact was unstable with the head rolling off the side of the airbag. 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. No passenger knee contacts were evident.

Side Impact Crash Test

Body region scores out of 4 points each: Head 4pts, chest 0.69pts, abdomen 1.81pts, pelvis 4pts.

The vehicle was not eligible for a Pole Impact Test since it did not have head-protecting side airbags. This test can earn eligible vehicles an extra two points.

Pedestrian rating (v4.1)



Based on Daewoo Kalos tested by ANCAP in 2003.

Child head impacts: Zero
Adult head impacts: 5 pts
Upper leg impacts: 3.4pts
Lower leg impacts: Zero
Total (out of 36): 8.4pts

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
	Driver	Passn	
Head			
- HIC	265	269	234
- Acceleration (g for 3ms)	40.2	40.5	46.6
Neck			
- Shear (kN)	0.6	0.46	
- Tension (kN)	1.7	1.37	
- Extension (Nm)	39.5	16.6	
Chest			
- Acceleration (g for 3ms)	48.5	27.1	
- Compression (mm)	44.2	27.1	28.2
- Viscous Criterion (m/s)	0.62	0.09	0.52
Abdomen			
- Force (kN)			1.82
Pelvis			
- Force (kN)			2.48
Upper Legs Force (kN)			
- Left	2.54	0.62	
- Right	4.6	2.64	
Knee Displacement (kN)			
- Left	1.04	0.01	
- Right	1.89	2.81	
Lower Legs Force (kN)			
- Left	1.4	1.87	
- Right	1.46	2.33	
Index (Upper Lower)			
- Left	0.29 0.28	0.31 0.14	
- Right	0.4 1.31	0.28 0.25	

Bonus points (maximum 5)

Pole Test: Zero points

Seat Belt Reminders: None fitted - zero points

Modifiers for offset test scores

Head	Unstable airbag contact	1 pt deduction
Chest	A-pillar displacement, Loss of structure	1 pt deduction, 1 pt deduction
Upper leg	Variable & conc. loading	2 pt deduction L & R
Lower leg		No deduction
Foot score	Brake pedal displacement	Score zero points
Structure		No deduction

Modifiers for side impact test scores

Head		No deduction
Chest	Backplate load, T12 moment	0.07 deduction, 2 pt deduction
Upper leg		No deduction
Lower leg		No deduction
Foot score		No deduction
Structure		No deduction



Version 1, Published on: 8/09/2006
Published by
New Car Assessment Program
PO Box 1555
Canberra ACT Australia 2601