

Crash Test Results

New Car Safety

HOLDEN BARINA SPARK 2010 on Front+side+head airbags



ANCAP Occupant
Protection
Rated ★★★★★

Occupant Protection Score 31.02 out of 37

Variant: 5 door hatch Eng: 1 litre (Europe)
Kerb weight: 980 kg Category: CAR - LIGHT
Vehicles built: 2009 Tested by Euro NCAP

Important note: The *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 Holden Barina Spark was introduced in Australia during 2010. It has a 1.2 litre engine.

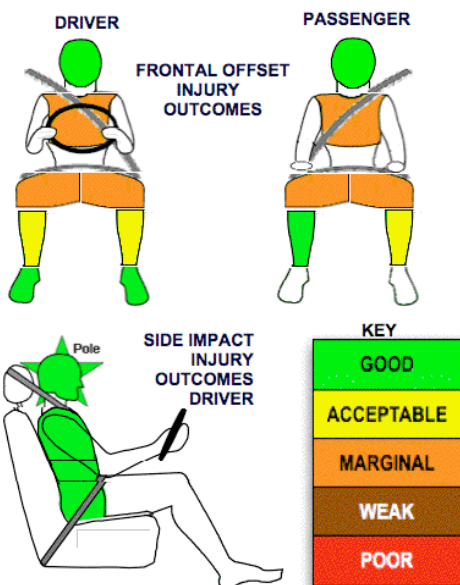
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD), brake assist and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to both front seats.

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 Barina Spark scored 11.02 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 and passenger.

The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the optional pole test.



Offset crash test at 64km/h (note the rear door has a concealed door handle)

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4 pts, chest 1.99 pts, upper legs 2 pts, lower legs 3.02 pts.

The passenger compartment held its shape well in the offset crash test. The accelerator pedal moved rearwards by 31 mm. The clutch pedal moved upwards 4 mm. The steering wheel hub moved 10mm forward, 9mm downward and 12 mm sideways. The front ("A") pillar moved 2 mm rearwards. All doors remained closed during the crash. After the crash the all doors could be opened with normal effort.

The airbag cushioned the head of the driver and contact was stable. Steering column, dash and glovebox were a potential source of knee injury for the driver and passenger. 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 4 pts, abdomen 4 pts, pelvis 4 pts.

All injury measurements were good in the side impact test. Euro NCAP conducted an optional pole test and the vehicle earned a further two points.

PEDESTRIAN PROTECTION - Pending

The Australasian model has a different bumper to the one tested by Euro NCAP. Additional pedestrian protection tests are being arranged.

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spark10.doc
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ANCAP

Crash testing for safety
AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

www.ancap.com.au

TECHNICAL DATA - HOLDEN BARINA SPARK - 2010 on

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v5)		Side Impact Crash Test at 50km/h (v5)
	Driver	Passenger	Driver
Head HIC	516	572	68
Acceleration (g for 3ms)	55.1	56.8	25.4
Neck - Shear (kN)	0.36	0.71	-
Tension (kN)	1.77	1.24	-
Extension (Nm)	17.2	12.1	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	36.05	31.56	19.78
Viscous criterion (m/s)	0.16	0.10	0.11
Abdomen - Force (kN)	-	-	0.490
Pelvis - Force (kN)	-	-	1.750
Upper legs Force (kN)			
Left	0.33	1.30	
Right	0.44	0.20	
Knee displ (mm)			
Left	0.00	0.10	
Right	0.20	0.10	
Lower legs Force (kN)			
Left	2.57	2.77	
Right	2.93	1.95	
Index (Upper/Low)			
Left	0.53 /0.19	0.34 /0.26	
Right	0.56 /0.62	0.39/0.14	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 2 (see table below for details)

Modifiers - deductions from offset test scores

Head	No deduction
Chest	No deduction
Upper leg Variable & conc. loading for driver and passenger	2 pt deduction Left & Right
Lower leg	No deduction
Foot score	Score 4 points

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/S
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	Whiplash Rating	Pending
Side airbags, rear seats - head protection	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Intelligent seat belt reminder - rear seats	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

