

Crash Tests

New Car Safety

HOLDEN ASTRA CD/CDX (LHD)

2004 on

Front+side airbags

Overall Evaluation



Overall score

31.54 out of 37

Variant: CD/CDX 5 DR HATCH

Eng: 1.6 litre.

Kerb weight: 1240 kg

Category: SMALL CAR

Vehicles built: 2004

Test 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. See the additional note under "Side Impact Crash Test".

Model History and Safety Features

The tested model of New Astra was introduced in Australia during 2004.

Dual front airbags and side airbags are standard equipment on all variants of the New Astra in Australia and New Zealand. ABS brakes are also standard. The CDXi variants has head-protecting side curtains as standard and is covered by a separate ANCAP assessment. Advanced seat belt reminders are fitted to both front seats. 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 : 4 Stars

The Astra scored 13.67 out of 16 in the offset crash test. There was a slight risk of serious chest and leg injury for the driver and passenger. The vehicle scored 15.87 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver.

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 2.94pts, upper legs 3pts, lower legs 3.73pts.

The passenger compartment held its shape very well in the offset crash test. The brake and clutch pedals broke away by design, to reduce the risk of injury. The accelerator pedal moved rearwards 56mm and upwards 1mm. The steering wheel hub moved forwards 43mm, downwards 2mm and sideways 2mm. The front ("A") pillar moved 2mm rearwards. The width of the driver's doorway shortened by 2mm. All doors remained closed during the crash. After the crash all doors could be opened normally.

The airbag cushioned the head of the driver and contact was stable. Stiff components were a potential source of injury for the driver and passenger's knees.

SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4pts, chest 3.87pts, abdomen 4pts, pelvis 4pts.

A dummy backplate load of 1.19kN resulted in a 0.13pt deduction from the chest score, to account for increased risk of injury to a real person.

While the vehicle tested by Euro NCAP had a head-protecting side curtain the CD and CDX models in Australia do not. This



Offset crash test at 64km/h

means that the pole test score does not apply to these models. However they do have side airbags that protect the chest and abdomen. ANCAP has support for applying the Euro NCAP results for the offset and side impact tests to these models. This is based on the assumption that head protection will be good in the side impact, even without a side curtain.

INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passn	Driver
Head HIC	372	198	62
Acceleration (g for 3ms)	44.15	34.92	27.97
Neck - Shear (kN)	0.33	0.64	-
Tension (kN)	1.3	0.94	-
Extension (Nm)	17.51	20.57	-
Chest Accln (g for 3ms)	-	-	-
Compression (mm)	29.39	24.97	13.84
Viscous criterion (m/s)	0.09	0.09	0.11
Abdomen - Force (kN)	-	-	0.8
Pelvis - Force (kN)	-	-	1.54
Upper legs Force Left	0.25	0.29	
(kN) Right	0.13	0.26	
Knee displ (mm) Left	0	1.16	
Right	0.08	0.44	
Lower legs Force Left	1.76	1.66	
(kN) Right	2.32	1.4	
Index (Upper/Low) Left	0.42/0.19	0.27/0.16	
Right	0.46/0.21	0.31/0.15	

Bonus points (maximum 5)

Pole Test: Not eligible

Seat belt reminders: 2pts

Modifiers - offset test scores

Head

No deduction

Chest

No deduction

Upper leg Variable loading - drv

1pt deduction L

Variable loading - passn

1pt deduction R

Lower leg

No deduction

Foot score

Score 4 points

Modifiers - side impact test scores

Chest Backplate load

0.13 deduction

Pedestrian rating (v4.1)



2.94 points out of 36.

Child head impacts 0.94pts; adult head impacts 2pts; upper leg zero pts and lower leg impacts zero pts.



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