

# Crash Tests

## New Car Safety

### VAUXHALL/HOLDEN\* ASTRA

1999 on Dual front airbags

#### Overall Evaluation\*



Overall score\*

25.11 out of 34

Variant: 5 door hatch.  
Kerb weight: 1100 kg  
Vehicles built: 1999

Engine: 4 Cyl. 1.6 litre.  
Category: SMALL CAR  
Tested by EuroNCAP\*

**\*Important note:** The European model was tested by EuroNCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

#### Safety features

Dual airbags are standard equipment in Australia and Europe. Side airbags are available in Europe but were not on the test vehicle (the EuroNCAP brochure erroneously reported that the vehicle had side airbags). Side airbags are not currently 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. The front seat belts have pretensioners to reduce slack in the event of a severe crash. The centre rear seat has a 3-point seat belt.

#### OVERALL EVALUATION : 4 Stars

The VAUXHALL ASTRA performed very well in the offset crash test (score 13.43 out of 16 points). The passenger compartment held its shape well. Airbags protected the driver and passenger.

The vehicle also performed well in the side impact crash (score 11.68 out of 16 points) but there was a moderate risk of life threatening abdomen and pelvis injury for the driver.

#### FRONTAL OFFSET CRASH TEST

The passenger compartment held its shape well in the offset crash test. The steering column moved back 4cm and up 8cm. There was little footwell intrusion. The brake pedal moved rearwards by 11cm but the pedals partly broke away for extra protection. The roof buckled upwards slightly at the top of the front pillar. The width of the driver's doorway shortened by 3cm. All doors remained closed during the crash. After the crash high manual effort was required to fully open the driver's door.

The airbag cushioned the head of the driver and contact was stable. The passenger's head was also cushioned by an airbag.

#### SIDE IMPACT CRASH TEST

The centre pillar and the side doors were pushed inwards moderately. The rear door on the struck side released.

The driver's motion was well controlled.



Offset crash test at 64km/h

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, giving a maximum possible overall score of 34 points.

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
	Driver	Passn	Driver
<b>Head HIC</b>	443.7	171.7	117.8
Acceleration (g for 3ms)	57.02	31.77	51.18
<b>Neck - Shear (kN)</b>	0.41	0.66	-
Tension (kN)	1.72	1.09	-
Extension (Nm)	7.79	19.99	-
<b>Chest Accln (g for 3ms)</b>			-
Compression (mm)	36.41	29.54	18.76
Viscous criterion (m/s)	0.14	0.18	0.36
<b>Abdomen - Force (kN)</b>	-	-	1.58
<b>Pelvis - Force (kN)</b>	-	-	4.9
<b>Upper legs Force</b>			
(kN) Left	0.37	0.26	
Right	0.73	0.64	
<b>Knee displ (mm)</b>			
Left	0.25	0.02	
Right	0.96	0.49	
<b>Lower legs Force</b>			
(kN) Left	1.36	1.18	
Right	1.13	0.96	
<b>Index (Upper/Low)</b>			
Left	0.3/0.39	0.28/0.19	
Right	0.4/0.21	0.37/0.16	

#### Modifiers for offset test scores

Head	Steering col. movement up	0.3 pt penalty
Chest		No penalty
Upper legs		No penalty
Foot score	Brake pedal movement	3.8 score

#### Pedestrian rating:



6.74 out of 36 points (18.7%)

Child head impact 4.28 pts; adult head impact 2.46 pts; upper leg impact zero pts; lower leg impact zero pts.



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