

Crash Test Results

New Car Safety

HOLDEN ASTRA (LHD) CD HATCH

March 2008 on Front+side airbags



Offset crash test at 64km/h

FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4.000 pts, chest 2.944 pts, upper legs 3.000 pts, lower legs 3.729 pts.

The passenger compartment held its shape 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 by 56mm and upwards 1 mm. The steering wheel hub moved 43mm forward, 2mm downward and 2 mm sideways. The front ("A") pillar moved 2 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 and contact was stable. Dash components were a potential source of injury for the driver and passenger 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 3.87 pts, abdomen 4 pts, pelvis 4 pts.

The side crash test rating is based on a Euro NCAP test of a vehicle with head-protecting side curtains. The Astra CD does not have side curtains but ANCAP was provided with evidence that the same results can be expected for this model. It was not eligible for the optional pole test which earned the curtain-equipped model an extra 2 points and a 5 star rating.

PEDESTRIAN PROTECTION: 1 Star

Only two small areas of the bonnet top offered protection. But its leading edge and the car's bumper proved to be very unfriendly.

PEDESTRIAN PROTECTION		
 ANCAP Rated ★ ★ ★ ★ ★ Tested by Euro NCAP v4.1	Child head impacts	0.94
	Adult head impacts	2
	Upper leg impacts	Zero
	Lower leg impacts	Zero
	Total (out of 36)	2.94

[no image of pedestrian protection available]



Occupant Protection Score 31.54 out of 37

Variant: CD 5dr hatch Eng: 1.6 litre
 Kerb weight: 1240 kg Category: SMALL CAR
 Vehicles built: 2004 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

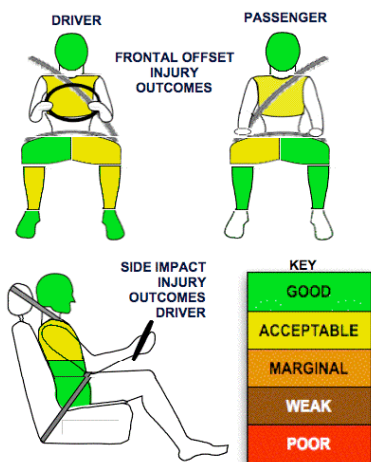
The Holden Astra was introduced in Australia during 2004. This updated rating applies to Astra CD hatches built from March 2008.

Dual front airbags and thorax/pelvis-protecting side airbags are standard equipment on the CD variant. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent 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. 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 Astra scored 13.67 out of 16 in the offset crash test. The passenger compartment held its shape very well. 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. A separate ANCAP rating is available for Astras with side curtains.



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TECHNICAL DATA - HOLDEN ASTRA CD HATCH - June 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	372		62
Acceleration (g for 3ms)	44.2	34.9	28.0
Neck - Shear (kN)	0.33	0.64	-
Tension (kN)	1.30	0.94	-
Extension (Nm)	17.5	20.6	-
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)	-	-	0.800
Pelvis - Force (kN)	-	-	1.540
Upper legs Force (kN)			
Left	0.25	0.29	
Right	0.13	0.26	
Knee displ (mm)			
Left	0.00	1.16	
Right	0.08	0.44	
Lower legs Force (kN)			
Left	1.76	1.66	
Right	2.32	1.40	
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 due to a lack of head-protecting side airbags

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

Head	No deduction
Chest	No deduction
Upper leg Variable contact	1 pt deduction Left drv & Right pass
Lower leg	No deduction
Foot score	Score 4 points

Modifiers - deductions from side impact test scores

Chest Backplate load	0.13pt 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	V	Active head restraints - front seats	X
Side airbags, rear seats - head protection	V	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	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