

# Crash Test Results

## New Car Safety

### HOLDEN CRUZE

2009 on Front+side+head airbags



**ANCAP** Occupant Protection  
Rated ★★★★★

**Occupant Protection Score** 35.04 out of 37

Tested variant: CD sedan Eng: 1.8 petrol manual  
Kerb weight: 1380 kg Category: CAR - SMALL  
Vehicles built: 2009

#### Model History and Safety Features

The tested model of Holden Cruze was introduced in Australia during May 2009. This rating applies to all Cruze variants - hatch, sedan and wagon with diesel or petrol engines.

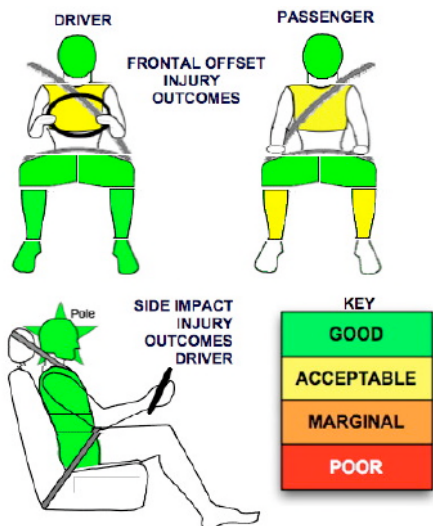
Dual front airbags, side airbags with chest and pelvis protection and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Advanced seat belt reminders are fitted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

Dual pretensioners are fitted to the front seat belts to reduce slack in the event of a crash.

#### OCCUPANT PROTECTION: 5 Stars

The Cruze scored 15.04 out of 16 in the offset crash test. The passenger compartment held its shape very well. There was a slight risk of serious chest injury 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.



#### Whiplash Protection



Offset crash test at 64km/h

#### FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.13 pts, upper legs 4 pts, lower legs 3.91 pts.

The passenger compartment held its shape very well in the offset crash test. The brake pedal moved rearwards by 19 mm. The accelerator pedal moved upwards 6 mm. The steering wheel hub moved 66mm forward, 18mm downward and 5 mm sideways. The front ("A") pillar moved 4 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. There were no driver or passenger knee contacts. The passenger's head was cushioned by the airbag and contact was stable.

#### SIDE IMPACT CRASH TEST (v4.1)

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

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and it was within reach of a 5 star rating. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

#### PEDESTRIAN PROTECTION: Marginal

Protection for the child and adult head on the bonnet was mostly fair or marginal with base of the windscreen offering poor protection. Protection offered by the bumper and front edge of the bonnet was poor.

PEDESTRIAN PROTECTION	
<b>MARGINAL</b>	
v5.3	

Child head impacts	9.51
Adult head impacts	4.1
Upper leg impacts	Zero
Lower leg impacts	Zero
Total (out of 36)	13.61



Child and adult head impact



Adult leg impact (upper and full leg/forms)

pass marginal fail

May 2009

PO Box 4041

Manuka ACT 2603

cruze09.doc Rated: 2009

Revised 8/11/2012



**ANCAP**

Crash testing for safety

AUSTRALASIAN  
NEW CAR ASSESSMENT

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# TECHNICAL DATA - HOLDEN CRUZE - 2009 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
<b>Head HIC</b>	399	482	48
Acceleration (g for 3ms)	44.9	55.5	23.8
<b>Neck - Shear (kN)</b>	1.01	0.84	-
Tension (kN)	0.90	0.74	-
Extension (Nm)	7.1	16.6	-
<b>Chest Accln (g for 3ms)</b>	41.2	36.9	-
Compression (mm)	28.10	24.70	17.30
Viscous criterion (m/s)	0.10	0.06	0.08
<b>Abdomen - Force (kN)</b>	-	-	0.498
<b>Pelvis - Force (kN)</b>	-	-	1.570
<b>Upper legs Force (kN)</b>			
Left	0.32	0.11	
Right	0.15	0.09	
Knee displ (mm)			
Left	0.83	0.67	
Right	0.24	1.61	
<b>Lower legs Force (kN)</b>			
Left	1.27	0.15	
Right	1.29	0.10	
Index (Upper/Low)			
Left	0.30 /0.22	0.32 /0.42	
Right	0.28 /0.15	0.41/0.13	

### 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 No deduction  
 Lower leg No deduction  
 Foot score Score 4 points  
 Note: Steering column and pedal movements are measured relative to the driver's seat.



### Modifiers - deductions from side impact test scores

Chest No deduction

### 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 protection (RCAR protocol)	Good
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	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