

Crash Tests

New Car Safety

Holden Commodore

06/2006 on 09/2008 - Dual Frontal

Overall Evaluation



Overall Score

Variant: VE Omega 4 Dr Sedan

27.45 out of 37

Engine: 3.6 litre V6

Category: Large Car

Model History and Safety Features

The tested model of Holden Commodore was introduced in Australia during 2006. Dual front airbags are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Side airbags and head-protecting side curtains are optional on the Omega variant and standard on other variants. An intelligent seat belt reminder is fitted to the driver's seat. All Commodores built from 2007 are eligible for a bonus point for this feature. Most Commodores built in 2006 were not eligible for this bonus point because the driver seat belt reminder did not fully meet the ANCAP protocol. 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 (lap) seat belt.

Overall Evaluation: 4

4 stars. The Holden Commodore scored 11.45 out of 16 in the offset crash test. The passenger compartment held its shape very well. Protection from serious leg injury was marginal for the driver. The vehicle scored 15 out of 16 in the side impact crash test. All injury values were good but a point was lost because a rear door opened during the crash.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 2.70 pts, upper les 2 pts, lower legs 2.76 pts. The passenger compartment held its shape very well in the offset crash test. The accelerator pedal moved rearwards by 7mm and the brake pedal moved rearwards 4mm. The steering wheel hub moved forwards 59mm, downwards 61mm and sideways 17mm. The front ("A") pillar moved 3mm 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. Steering column components were a potential source of injury for the driver's knees. 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. During the crash the rear door on the struck side opened slightly. This resulted in a one point deduction from the side impact score. 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.

Pedestrian rating (v4.1)



Child head impacts: 5.98.
Adult head impacts: 3.
Upper leg impacts: zero.
Lower leg impacts: zero.
Total (out of 36): 8.98.

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test aa 50km/h (v4.1) Driver
	Driver	Passn	
Head			
- HIC	314	221	49
- Acceleration (g for 3ms)	45.1	36.8	30.6
Neck			
- Shear (kN)	0.49	0.43	
- Tension (kN)	0.82	0.91	
- Extension (Nm)	6.8	22.6	
Chest			
- Acceleration (g for 3ms)	38.1	35.8	
- Compression (mm)	31.13	28.73	16.6
- Viscous Criterion (m/s)	0.07	0.07	0.07
Abdomen			
- Force (kN)			0.53
Pelvis			
- Force (kN)			1.37
Upper Legs Force (kN)			
- Left	0.42	0.25	
- Right	0.57	0.3	
Knee Displacement (kN)			
- Left	0.27	0.67	
- Right	0.13	0.29	
Lower Legs Force (kN)			
- Left	2.32	1.33	
- Right	3.3	1.55	
Index (Upper Lower)			
- Left	0.42 0.5	0.32 0.12	
- Right	0.53 0.68	0.39 0.24	

Bonus points (maximum 5)

Pole Test: Not eligible

Seat Belt Reminders: 1 (for all Commodores built from 2007)

Modifiers for offset test scores

Head		no deduction
Chest		no deduction
Upper leg	variable & Conc. loading	2 pt deduction left
Lower leg		no deduction
Foot score		4 pts
Structure	Note: Steering column & pedal movements	are measured relative to the driver's seat.

Modifiers for side impact test scores

Head		
Chest		no deduction
Upper leg		
Lower leg		
Foot score		
Structure	door opened during crash	1 pt deduction



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