Crash Tests

New Car Safety

Holden Commodore

10/2002 on 08/2006 - Dual Frontal

Overall Evaluation



Overall Score

Variant: VY Executive 4 Dr Sedan

26.74 out of 37 Engine: 3.8 Litre V6 Category: Large Car

Model History and Safety Features

The tested model of HOLDEN COMMODORE VY was introduced in 2002. A seat belt reminder and a minor change to the rear doors were introduced in April 2003. An upgraded rear door was used in the side impact test.

Dual front airbags are standard equipment. Side airbags with head protection are standard on some variants and available as part of an optional package on others. They were not on the tested vehicles. ABS brakes, driver's seat belt reminder, automatic headlights ("twilight sentinel") and emergency mode features, such as fuel cut-off in a severe crash, are standard on all variants.

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. These seat belts also have load limiters. 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

The HOLDEN COMMODORE VY scored 12.79 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a marginal risk of serious chest injury for the driver and passenger.

The vehicle scored 12.96 out of 16 in the side impact crash test. Protection from serious chest injury was weak for the driver.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4pts, chest 2.63pts, upper legs 3pts, lower legs 3.16pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 117mm and upwards 16mm, relative to the driver's seat. The dash moved 48mm towards the driver. The steering wheel hub moved rearwards 11mm, upwards 72mm and sideways 10mm. The front ("A") pillar moved 78mm rearwards. The roof had very little deformation and the width of the driver's doorway shortened by 44mm. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

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. The passenger's right knee hit the glove box and

Side Impact Crash Test

Body region scores out of 4 points each: Head 4pts, chest 1.2pts, abdomen 3.76pts, pelvis 4pts.

The vehicle was not eligible for a Pole Impact Test since it did not have headprotecting side airbags. This test can earn eligible vehicles an extra two points.

Pedestrian rating (v3)



0.08 points out of 36 (0.2%); Child head impacts 0.08pts; Adult head impacts zero pts; Upper leg zero pts; Lower leg impacts zero pts.





Injury Measurements

Refer to the information sheet	Offset Crash Test at 64km/h		Side Impact
'How the tests are done'	(v3.1)		Crash Test aa
			50km/h (v3.1)
	Driver	Passn	Driver
Head			
- HIC	349	219	142
- Acceleration (g for 3ms)	49.2	38.3	39.1
Neck			
- Shear (kN)	0.64	0.71	
- Tension (kN)	1	1.22	
- Extension (Nm)	17.3	22.7	
Chest			
- Acceleration (g for 3ms)	39.7	33.6	
- Compression (mm)	31.6	31.5	36
- Viscous Criterion (m/s)	0.11	0.12	0.58
Abdomen			
- Force (kN)			1.09
Pelvis			
- Force (kN)			2.02
Upper Legs Force (kN)			
- Left	0.67	0.26	
- Right	0.59	0.38	
Knee Displacement (kN)			
- Left	0.52	0.17	
- Right	0.28	0.09	
Lower Legs Force (kN)			
- Left	1.23	2.13	
- Right	2.01	2.14	
Index (Upper Lower)			
- Left	0.41 0.42	0.28 0.16	
- Right	0.37 0.38	0.59 0.46	

Bonus points (maximum 5)

Pole Test: Not eligible - zero points Seat Belt Reminders: Fitted to driver's seat only - 1 point

Modifiers for offset test scores

Head No deduction No deduction Chest 1 pt deduction R Upper leg conc. loading Lower leg No deduction Foot score Score 3.32 pts No deduction Structure

Modifiers for side impact test scores

Head No deduction Chest Back plate load 1.12kN Not applied Upper leg No deduction Lower leg No deduction Foot score No deduction Structure Door opening during crash No deduction



Version 1, Published on: 7/04/2006 Published by New Car Assessment Program PO Box 1555 Canberra ACT Australia 2601