

Crash Tests

New Car Safety

Toyota Aurion

06/2006 on 07/2009 - Frontal+Side+Head

Offset crash test at 64km/hr



Overall Evaluation



Overall Score

Variant: AT-X

30.03 out of 37

Engine: 3.5 litre V6

Category: Large Car

Model History and Safety Features

The tested model of Toyota Aurion was introduced in Australia during 2006.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS) with electronic brake distribution (EBD) and electronic stability control are also standard. An intelligent seat belt reminder is fitted to the driver's seat.

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

The Toyota Aurion scored 13.59 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver.

The vehicle scored 15.44 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4pts, chest 4pts, upper legs 2pts, lower legs 3.59pts.

The passenger compartment held its shape well in the offset crash test. The park brake pedal moved rearwards by 101mm and upwards 48mm. The steering wheel hub moved forwards 5mm, upwards 27mm and sideways 19mm. The front ("A") pillar moved 17mm rearwards. All doors remained closed during the crash. After the crash all doors opened with normal effort. It was noted that the airbag deployed relatively late in the crash event. Despite this, the airbag fully inflated, head contact was stable and injury measurements indicated a low risk of serious head injury. 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 4pts, chest 3.44pts, abdomen 4 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole test but the manufacturer decided not to go ahead with this test, which can earn a further two points.

Pedestrian rating (v4.1)



Child head impacts: 1.47.
Adult head impacts: 6.29.
Upper leg impacts: zero.
Lower leg impacts: zero.
Total (out of 36): 7.76.

Injury Measurements

	Refer to the information sheet 'How the tests are done'		Offset Crash Test at 64km/h (v4.1)	Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passn	Driver	Driver
Head				
- HIC	725	388	47	
- Acceleration (g for 3ms)	76.2	48.9	24.4	
Neck				
- Shear (kN)	0.39	0.35		
- Tension (kN)	2.53	1		
- Extension (Nm)	36	22		
Chest				
- Acceleration (g for 3ms)	48.8	31.5		
- Compression (mm)	21.5	20.8	18.9	
- Viscous Criterion (m/s)	0.1	0.09	0.14	
Abdomen				0.946
- Force (kN)				
Pelvis				2.73
- Force (kN)				
Upper Legs Force (kN)				
- Left	2.18	0.52		
- Right	0.3	4.03		
Knee Displacement (kN)				
- Left	0.83	4.41		
- Right	0.38	4.04		
Lower Legs Force (kN)				
- Left	2.51	1.62		
- Right	1.83	2.62		
Index (Upper Lower)				
- Left	0.48 0.39	0.41 0.3		
- Right	0.34 0.25	0.27 0.24		

Bonus points (maximum 5)

Pole Test: Eligible but not tested - zero points

Seat Belt Reminders: Fitted to drivers seat only - 1 point

Modifiers for offset test scores

Head		no deduction
Chest		no deduction
Upper leg	variable & Conc. loading	2 pt deduction R, 1 pt deduction L
Lower leg		no deduction
Foot score	brake pedal movement	3.96 points
Structure	Steering column and pedal movements are	measured relative to driver's seat.

Modifiers for side impact test scores

Head		
Chest	Spine & backplate loads	0.56 pt deduction
Upper leg		
Lower leg		
Foot score		
Structure		