

Crash Test Results

New Car Safety

TOYOTA AURION

Aug 2009 on* Front+side+head airbags



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 4 pts, upper legs 2 pts, lower legs 3.59 pts.

The passenger compartment held its shape well in the offset crash test. The park brake pedal moved rearwards by 101 mm and upwards 48 mm. The steering wheel hub moved forwards 5mm, upwards 27 mm and sideways 19 mm. The front ("A") pillar moved 17 mm rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort.

It was noted that the airbag deployed relatively late in the crash event. Despite this, the airbag still 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 (v4.1)

Body region scores out of 4 points each: Head 4 pts, chest 3.44 pts, abdomen 4 pts, pelvis 4 pts.

The vehicle was eligible for an optional pole test and, in 2009, the manufacturer decided to go ahead with this test. This earned a further two points.

PEDESTRIAN PROTECTION RATING: 1 Star

The Aurion provided a fair to marginal level of protection for many of the adult and child head zones. However, the results for the leg tests were uniformly poor.

Occupant Protection Score 33.03 out of 37

* Front passenger seat belt reminder, which is needed for this 5-star rating, is standard from August 2009

Variant: AT-X

Eng: 3.5 litre V6

Kerb weight: 1580 kg

Category: CAR - LARGE

Vehicles built: 2006 & 2009

Model History and Safety Features

The tested model of Toyota Aurion was introduced in Australia during 2006. This 5-star rating applies to Aurions built from August 2009, when a front passenger seat belt reminder was introduced. The Aurion has had an intelligent seat belt reminder for the driver seat since 2006.


Dual front airbags, side airbags and head-protecting side curtains are standard equipment from 2006. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard from 2006.

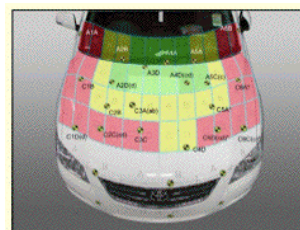
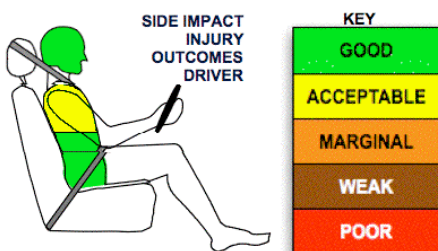
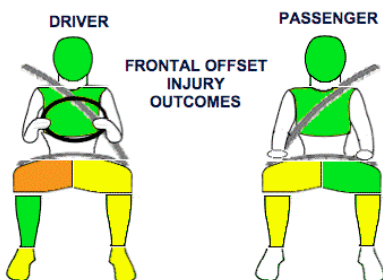
The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pre-tensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

OCCUPANT PROTECTION: 5 Stars

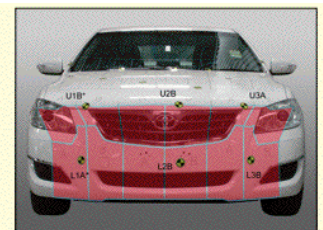
The Toyota Aurion scored 13.59 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver.

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. A further 2 points were earned in the optional pole test.

PEDESTRIAN PROTECTION		
 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



Child and adult head impact



Adult leg impact (upper and full legforms)

fair marginal poor

August 2009

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TECHNICAL DATA - TOYOTA AURION - August 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
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	1.00	-
Extension (Nm)	36.0	22.00	-
Chest Accln (g for 3ms)	48.80	31.50	-
Compression (mm)	21.50	20.80	18.90
Viscous criterion (m/s)	0.10	0.09	0.14
Abdomen - Force (kN)	-	-	0.946
Pelvis - Force (kN)	-	-	2.730
Upper legs Force			
Left	2.18	0.52	
(kN) Right	0.30	4.03	
Knee displ (mm) Left	0.83	4.41	
Right	0.38	4.04	
Lower legs Force			
Left	2.51	1.62	
(kN) Right	1.83	2.62	
Index (Upper/Low) Left	0.48 /0.39	0.41 /0.30	
Right	0.34 /0.25	0.27/0.24	

Bonus points (maximum 5)

Pole Test: 2 points

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

Modifiers - deductions from offset test scores

Head No deduction

Chest No deduction

Upper leg Variable & conc. loading 2 pt deduction right

1 pt deduction left

Lower leg No deduction

Foot score Park brake pedal movement Score 3.96 points

Note: Steering column and pedal movements are measured relative to the driver's seat.

Modifiers - deductions from side impact test scores

Chest Spine & backplate loads 0.56 pt 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/Emergency 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	Active head restraints - front seats	S
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: * Front passenger seat belt reminder, which is needed for a 5-star rating, is standard from August 2009

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