

Crash Tests

New Car Safety

Toyota Prius

07/2004 on 06/2008 - Frontal+Side+Head

Overall Evaluation



Overall Score

Variant: i-Tech 5 Dr Hatch

33.72 out of 37

Engine: 1.5 Litre Hybrid
Category: Medium Car

Vehicles tested after 1 January 2008 will require Electronic Stability Control in order to achieve a 5 star rating. This vehicle was tested prior to this date and may or may not meet this new requirement.

The European model was tested by EuroNCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

Model History and Safety Features

The tested model of Toyota Prius was introduced in 2004.

Dual front airbags, side airbags and head-protecting side curtain airbags are standard equipment on the luxury (i-Tech) variant in Australia. ABS brakes and electronic stability control are also standard on this variant.

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 seat belt. Advanced seat belt reminders are fitted to the driver and front passenger seats.

Overall Evaluation: 5

The Toyota Prius i-Tech scored 13.72 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. 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. A further 2 points were scored in the optional pole test

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4pts, chest 3.72pts, upper legs 2pts, lower legs 4pts.

The passenger compartment held its shape well in the offset crash test. The park brake pedal moved rearwards by 75mm and upwards 14mm. The steering wheel hub moved forwards 10mm and downwards 1mm. The front ("A") pillar moved 30mm rearwards. The width of the driver's doorway shortened by 29mm. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door.

The airbag cushioned the head of the driver and contact was stable. Steering column and dash 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 4pts, abdomen 4pts, pelvis 4pts.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

Pedestrian rating (v4)



12.94 points out of 36.

Child head impacts 5.42pts;

Adult head impacts 7.52pts;

Upper leg zero pts and lower leg impacts zero pts.

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)		Side Impact Crash Test at 50km/h (v4) Driver
	Driver	Passn	
Head			
- HIC	250.62	189.08	26.57
- Acceleration (g for 3ms)	39.35	35.29	15.6
Neck			
- Shear (kN)	0.23	0.64	
- Tension (kN)	0.98	1.2	
- Extension (Nm)	11.94	23.07	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	23.93	22.1	10.57
- Viscous Criterion (m/s)	0.08	0.13	0.03
Abdomen			
- Force (kN)			0.7
Pelvis			
- Force (kN)			1.63
Upper Legs Force (kN)			
- Left	1.45	0.18	
- Right	1.23	2.38	
Knee Displacement (kN)			
- Left	0	0	
- Right	0	2.21	
Lower Legs Force (kN)			
- Left	1.55	1.72	
- Right	1.49	1.27	
Index (Upper Lower)			
- Left	0.29 0.3	0.33 0.15	
- Right	0.34 0.34	0.24 0.15	

Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: Fitted to both front seats - 2 points

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	Variable & concentrated loading No deduction
Lower leg	No deduction
Foot score	Score 4 pts
Structure	No deduction

Modifiers for side impact test scores

Head	Not assessed
Chest	Not assessed
Upper leg	Not assessed
Lower leg	Not assessed
Foot score	Not assessed
Structure	Not assessed



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