

Crash Tests

New Car Safety

Toyota Prius

09/2009 on 01/0001 - Front+side+head+knee

Overall Evaluation



Overall Score

Variant: 5 dr hatch

35.24 out of 37

Engine: Hybrid 1.8

Category: Small Car

The right-hand-drive European model was tested by Euro NCAP. 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 Australia and New Zealand during 2009.

Dual front airbags, side airbags, head-protecting side curtains and a driver knee airbag are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Radar Cruise Control and Pre-Collision Safety System are available for the i-Tech variant. Intelligent seat belt reminders are fitted to both front seats. Pretensioners 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: 5

5 Stars. The Prius scored 15.24 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious leg injury for the driver and passenger and a slight risk of serious chest injury for the passenger. The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the optional pole test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.85 pts, upper legs 4 pts, lower legs 3.39 pts.

The passenger compartment held its shape well in the offset crash test. The accelerator pedal moved rearwards by 50 mm and upwards 15 mm. The steering wheel hub moved 39mm forward, 37 mm upward and 7mm sideways. The front ("A") pillar moved 18 mm rearwards. All doors remained closed during the crash. After the crash the driver's door could be opened with high manual effort.

The airbag cushioned the head of the driver and contact was stable. The knee airbag protected the driver's knee from injury. 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.

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

Pedestrian rating (v4.2)



The bonnet offered good protection in most areas likely to be struck by a child's head. Protection of an adult's head was predominantly good or marginal, as was the protection offered to pedestrians' legs by the bumper and the front edge of the bonnet.

Child head impacts	8.434
Adult head impacts	6.434
Upper leg impacts	4.318
Lower leg impacts	5.248
Total (out of 36)	24.43

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test aa 50km/h (v4.2)
	Driver	Passn	Driver
Head			
- HIC	214	319	36
- Acceleration (g for 3ms)	36.8	48.2	18.7
Neck			
- Shear (kN)	0.31	0.39	
- Tension (kN)	1.24	0.65	
- Extension (Nm)	9.5	23.7	
Chest			
- Acceleration (g for 3ms)			
- Compression (mm)	21.08	23.04	10.66
- Viscous Criterion (m/s)	0.08	0.09	0.05
Abdomen			
- Force (kN)			0.6
Pelvis			
- Force (kN)			1.7
Upper Legs Force (kN)			
- Left	0.26	0.8	
- Right	1.75	1.4	
Knee Displacement (kN)			
- Left	1.3	0.2	
- Right	0.7	0.8	
Lower Legs Force (kN)			
- Left	1.99	1.66	
- Right	2.92	2.1	
Index (Upper Lower)			
- Left	0.27 0.42	0.26 0.19	
- Right	0.44 0.3	0.26 0.25	

Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: 2

Modifiers for offset test scores

Head	No deduction
Chest	No deduction
Upper leg	No deduction
Lower leg	No deduction
Foot score	No deduction
Structure	4 points

Modifiers for side impact test scores

Head	
Chest	No deduction
Upper leg	
Lower leg	
Foot score	
Structure	



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