

# Crash Test Results

## New Car Safety

### TOYOTA PRIUS

2009 on Front+side+head+knee airbags



**ANCAP** Occupant Protection  
Rated ★★★★★

**Occupant Protection Score 35.24 out of 37**

Variant: 5 door hatch Eng: Hybrid 1.8  
Kerb weight: 1420 kg Category: CAR - SMALL  
Vehicles built: 2009 Tested by Euro NCAP

**Important note:** 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.

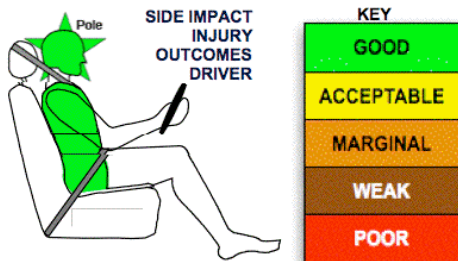
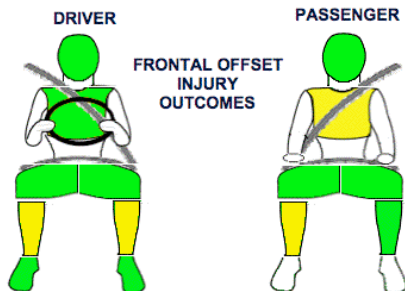
Dual front airbags, side airbags, head-protecting side curtains and a driver knee airbag are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Radar Cruise Control and Pre-Collision Safety 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.

#### OCCUPANT PROTECTION: 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.



Offset crash test at 64km/h

#### FRONTAL OFFSET CRASH TEST (v4.2)

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 (v4.2)

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 PROTECTION: 3 Stars

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.

PEDESTRIAN PROTECTION	Child head impacts	8.434
 Rated ★★☆☆	Adult head impacts	6.434
	Upper leg impacts	4.318
	Lower leg impacts	5.248
	Total (out of 36)	24.43
	Tested by Euro NCAP v4.2	



GOOD (green)  
ADEQUATE (yellow)  
MARGINAL (red)

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**ANCAP**

Crash testing for safety  
AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

# TECHNICAL DATA - TOYOTA PRIUS - 2009 on

## INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test at 50km/h (v4.2)
	Driver	Passenger	Driver
<b>Head HIC</b>	214	319	36
Acceleration (g for 3ms)	36.8	48.2	18.7
<b>Neck - Shear (kN)</b>	0.31	0.39	-
Tension (kN)	1.24	0.65	-
Extension (Nm)	9.5	23.7	-
<b>Chest Accln (g for 3ms)</b>	-	-	-
Compression (mm)	21.08	23.04	10.66
Viscous criterion (m/s)	0.08	0.09	0.05
<b>Abdomen - Force (kN)</b>	-	-	0.600
<b>Pelvis - Force (kN)</b>	-	-	1.700
<b>Upper legs Force (kN)</b>			
Left	0.26	0.80	
Right	1.75	1.40	
<b>Knee displ (mm)</b>			
Left	1.30	0.20	
Right	0.70	0.80	
<b>Lower legs Force (kN)</b>			
Left	1.99	1.66	
Right	2.92	2.10	
<b>Index (Upper/Low)</b>			
Left	0.27 /0.42	0.26 /0.19	
Right	0.44 /0.30	0.26/0.25	

### Bonus points (maximum 5)

Pole Test: 2 pts

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

### Modifiers - deductions from offset test scores

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

### Modifiers - deductions from side impact test scores

Chest	No deduction
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### 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 / 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		Intelligent seat belt reminder - driver	S
Driver knee airbag	S	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Rear seat belt status indicator	X*

Key: \* Vehicle assessed by Euro NCAP had a rear seat belt reminder system that earned 1 extra point.

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

# ESC required by ANCAP for 5 star rating from 2008