

# Crash Test Results

## New Car Safety

### TOYOTA CAMRY HYBRID

2010 on

Front+side+head airbags



Offset crash test at 64km/h



**ANCAP**

Rated ★★★★★

**Occupant Protection**

**Occupant Protection Score 28.22 out of 37**

Variant: - Eng: 2.4 litre petrol/electric  
Kerb weight: 1620 kg Category: CAR - LARGE  
Vehicles built: 2010

#### Model History and Safety Features

The tested model of Toyota Camry Hybrid was introduced in Australia during 2010.

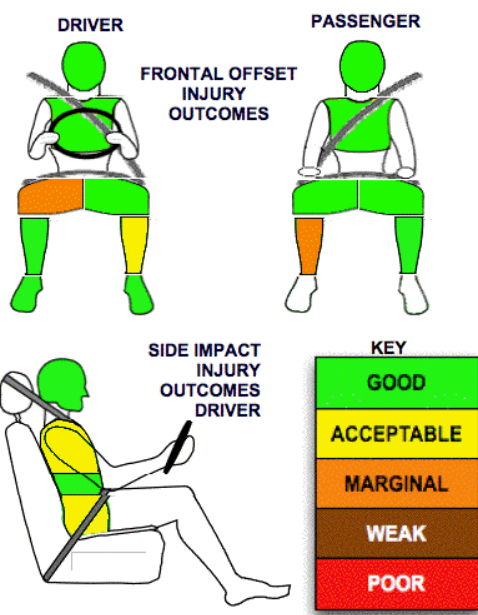
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. An advanced seat belt reminder is fitted to the driver seat. A reversing camera is standard.

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: 4 Stars

The Camry Hybrid scored 12.37 out of 16 in the offset crash test. The passenger compartment held its shape reasonably well. Protection from serious leg injury was marginal for the driver and passenger.

The vehicle scored 14.85 out of 16 in the side impact crash test. There was a slight risk of serious chest and pelvic injury for the driver.



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

Body region scores out of 4 points each: Head/neck 4 pts, chest 4 pts, upper legs 2 pts, lower legs 2.37 pts.

The passenger compartment held its shape reasonably well in the offset crash test. There was deformation of the a-pillar and door sill. The floor under the driver buckled and the seat tilted forward and sideways. The accelerator pedal moved rearwards by 91 mm. The brake pedal moved upwards 49 mm. The steering wheel hub moved 16mm forward, 60 mm upward and 5 mm sideways. The a-pillar moved 28 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. Steering column components were a potential source of injury for the driver's right knee. 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 3.03 pts, abdomen 4 pts, pelvis 3.81 pts.

The vehicle was not eligible for a Pole Impact Test because the offset test score was less than 12.5 (the minimum needed for a 5-star rating). This test can earn eligible vehicles an extra two points.

#### PEDESTRIAN PROTECTION: Pending

April 2010

PO Box 4041  
Manuka ACT 2603  
camryhyb10.doc  
Issued 22/04/2010



**ANCAP**

Crash testing for safety

AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

# TECHNICAL DATA - TOYOTA CAMRY HYBRID - 2010 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>	269	185	29
Acceleration (g for 3ms)	43.5	33.9	20.4
<b>Neck - Shear (kN)</b>	0.36	0.33	-
Tension (kN)	1.46	0.59	-
Extension (Nm)	8.7	8.5	-
<b>Chest Accln (g for 3ms)</b>			-
Compression (mm)	19.00	18.30	11.90
Viscous criterion (m/s)	0.04	0.05	0.07
<b>Abdomen - Force (kN)</b>	-	-	0.870
<b>Pelvis - Force (kN)</b>	-	-	3.140
<b>Upper legs Force (kN)</b>			
Left	1.42	0.64	
Right	0.25	3.24	
<b>Knee displ (mm)</b>			
Left	0.40	1.95	
Right	0.40	3.80	
<b>Lower legs Force (kN)</b>			
Left	1.55	1.94	
Right	1.42	4.44	
<b>Index (Upper/Low)</b>			
Left	0.33 /0.45	0.32 /0.18	
Right	0.29 /0.36	0.42/0.49	

### Bonus points (maximum 5)

Pole Test: Not eligible

Seat belt reminders: 1 (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
Lower leg	No deduction
Foot score	Score 4 points

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

### Modifiers - deductions from side impact test scores

Chest Backplate & spine loads	0.97 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 / 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	X
Seat belt pretensioners (Front/rear outboard)	S/X	Intelligent seat belt reminder - rear seats	X

Key: \* Toyota's "Electronic Controlled Braking" provides similar functions to Brake Assist

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