

Crash Test Results

New Car Safety

TOYOTA CAMRY HYBRID

From May 2011 Front+side+head airbags



ANCAP

Rated ★★★★★

Occupant Protection

Occupant Protection Score 33.22 out of 37

Variant: - Eng: 2.4 litre petrol/electric
Kerb mass: 1620 kg Category: CAR - LARGE
Vehicles built: 2010 and 2011

Model History and Safety Features

The tested model of Toyota Camry Hybrid was introduced in Australia during 2010. This 5-star ANCAP rating applies to all Camry Hybrids built from May 2011, when a passenger seat belt reminder and improved driver knee protection were introduced.

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. Advanced 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 Camry Hybrid scored 14.37 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. A further 2 points were earned in the pole test.



Offset crash test at 64km/h

FRONTAL OFFSET CRASH TEST

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

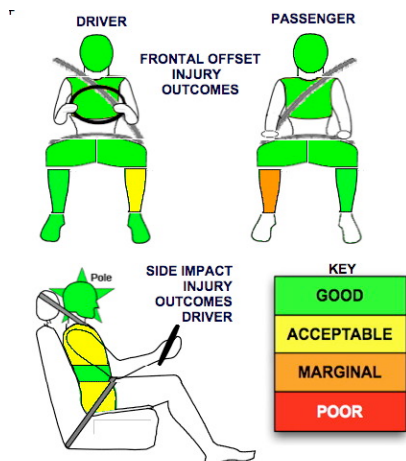
The airbag cushioned the head of the driver and contact was stable. There were no knee hazards with the improved design of steering column. The passenger's head was cushioned by the airbag.

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 scored the maximum two points in the optional pole test.

PEDESTRIAN PROTECTION: Pending



Whiplash Protection



MAY 2011

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camryhyb11.doc

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ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - TOYOTA CAMRY HYBRID - From May 2011

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4.2)		Side Impact Crash Test at 50km/h (v4.2)
	Driver	Passenger	Driver
Head HIC	269	185	29
Acceleration (g for 3ms)	43.5	33.9	20.4
Neck - Shear (kN)	0.36	0.33	-
Tension (kN)	1.46	0.59	-
Extension (Nm)	8.7	8.5	-
Chest Accln (g for 3ms)			-
Compression (mm)	19.00	18.30	11.90
Viscous criterion (m/s)	0.04	0.05	0.07
Abdomen - Force (kN)	-	-	0.870
Pelvis - Force (kN)	-	-	3.140
Upper legs Force (kN)			
Left	1.42	0.64	
Right	0.25	3.24	
Knee displ (mm)			
Left	0.40	1.95	
Right	0.40	3.80	
Lower legs Force (kN)			
Left	1.55	1.94	
Right	1.42	4.44	
Index (Upper/Low)			
Left	0.33 /0.45	0.32 /0.18	
Right	0.29 /0.36	0.42/0.49	

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 Variable & conc. loading	No deduction
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
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Safety features (May 2011)

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	Whiplash rating (RCAR Protocol)	Marginal
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	Intelligent seat belt reminder - rear seats	X

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

@ Standard from May 2011 and needed for this 5-star ANCAP rating

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