Crash Tests

New Car Safety

TOYOTA ECHO/YARIS

2000 or

Dual front airbags

Overall Evaluation



Overall score

28.53 out of 34

Variant: 3 Door Hatch LHD Kerb weight: 900 kg Vehicles built: 2000 Engine: 4 Cyl. 1 litre. Category: SMALL CAR Tested by EuroNCAP

*Important note: The left-hand-drive European Toyota Yaris 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.

Safety features

A driver's airbag is standard equipment in Australia. A passenger airbag is standard in Europe but optional in Australia.

The front seat belt buckles are mounted on the seats. This feature improves the fit of the seat belt. Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash.

OVERALL EVALUATION: 4 Stars

The TOYOTA ECHO/YARIS performed well in the offset crash test (score 12.53 out of 16). The passenger compartment held its shape very well. Injury measurements indicated a low risk of serious injury but stiff structures in the knee impact areas resulted in reduced upper leg scores.

The vehicle performed very well in the side impact crash (score 16 out of 16). EuroNCAP noted that this was remarkable for a car without side airbags.

FRONTAL OFFSET CRASH TEST

The passenger compartment held it shape very well in the offset crash test. The brake pedal moved rearwards by 8cm. The width of the driver's doorway shortened by 5cm. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

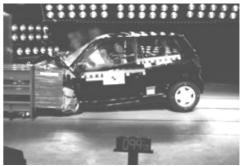
The airbag effectively cushioned the head of the driver and contact was stable. Knee impact areas had stiff structures and penalties applied to the upper leg scores.

SIDE IMPACT CRASH TEST

The centre pillar and the side doors were pushed inwards moderately.

The injury measurements were all good but the driver's head moved completely outside the window. In a real crash this could be very hazardous.

The vehicle was not eligible for a Pole Impact Test since it did not have head-protecting side airbags. This test can earn



Offset crash test at 64km/h

eligible vehicles an extra two points, giving a maximum possible overall score of 34 points.

INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"		Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
		Driver	Passn	Driver
Head HIC		436	139.4	136.1
Acceleration (g for 3ms)		49.03	30.34	39.03
Neck - Shear (kN)		0.12	0.62	-
Tension (kN)		0.83	0.39	-
Extension (Nm)		29.19	9.28	-
Chest Accln (g for 3ms)		-	-	-
Compression (mm)		27.64	27.69	13.13
Viscous criterion (m/s)		0.09	0.08	0.02
Abdomen - Force (kN)		-	-	0.97
Pelvis - Force (I	κN)	-	-	2.76
Upper legs Force	Left	0.58	2.45	
(kN)	Right	2.59	1.65	
Knee displ (mm)	Left	1.98	9.23	
	Right	5.41	2.2	
Lower legs Force Left		2.07	1.26	
(kN)	Right	2.28	1.61	
Index (Upper/Low)	Left	0.31/0.43	0.45/0.12	
	Right	0.36/0.28	0.27/0.19	

Modifiers for offset test scores

Head No penalty
Chest No penalty
Upper legs Variable & conc. loading Driver 2 pt
penalty L & R; Passenger 1 pt penalty L.
Loweer legs No penalty

Pedestrian rating:



12.84 out of 36 (35.7%)

Child head impacts 5.31 pts; adult head impacts 6 pts; upper leg impacts 1.54 pts; lower leg impacts zero pts.



November 2000

Published by New Car Assessment Program PO Box 1555 Canberra ACT Australia 2601 www.nrma.com.au echo_00.doc revised 26-Nov-01