

Crash Tests

New Car Safety

TOYOTA HILUX UTILITY (2WD)

September 2001 on No airbags

Overall Evaluation*



Overall score* 19.69 out of 34

* High risk of life threatening head and neck injury in offset test.

Variant: Single cab, 2WD Eng: 4cyl 2.7 litre.

Kerb weight: 1360 kg Category: UTILITY

Vehicles built: Sept 2001

Model History and Safety features

This model TOYOTA HILUX two-wheel-drive was introduced in September 2001.

The tested vehicles did not have airbags. Dual front airbags, together with ABS brakes, are available as part of an optional safety pack for about \$2,500.

OVERALL EVALUATION : 3 Stars

The TOYOTA HILUX 2WD scored 5.94 out of 16 in the offset crash test. The passenger compartment held its shape reasonably well. Protection from serious head and neck injury was poor for the driver, with a risk of life-threatening head injury greater than 50%. Chest protection was marginal for the driver and passenger. The vehicle scored 13.75 out of 16 in the side impact crash. There was a moderate risk of a life threatening head injury for the driver.

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck zero pts, chest 1.66pts, upper legs 1.58pts, lower legs 2.71pts.

The passenger compartment held its shape reasonably well in the offset crash test. The front part of the driver's floor was pushed rearwards 195mm. The brake pedal moved rearwards by 93mm and upwards 15mm. The dash moved 37mm towards the driver. The steering wheel hub moved upwards 64mm and sideways 101mm. There was no rearwards movement. The front ("A") pillar moved 86mm rearwards. The roof buckled upwards above the driver and the width of the driver's doorway shortened by 53mm. Both doors remained closed during the crash. After the crash high manual effort was required to open the driver's door. The driver's head hit the hub of the steering wheel with hard contact and protection from serious injury was poor. Driver neck tension was also poor. The driver's knees hit the dash, steering column and park brake lever. The passenger's knees hit the glove box and dash.

SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 1.75pts, chest 4pts, abdomen 4pts, pelvis 4pts.

This test simulates a fairly small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the Hilux. Such vehicles can be expected to perform relatively well in this particular side impact test. With the Hilux the lower part of the driver's door was pushed inwards substantially but intrusion was



Offset crash test at 64km/h

much less at seat height and above. The driver's head hit the unbroken side window and there was a moderate risk of serious injury.

The vehicle was not eligible for a Pole Impact Test since it did not have head-protecting side airbags. This test can earn 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	1396	621	378
Acceleration (g for 3ms)	103.5	57.8	81
Neck - Shear (kN)	0.94	1.29	-
Tension (kN)	3.55	2.41	-
Extension (Nm)	24.94	13	-
Chest Accln (g for 3ms)	46.6	35.6	-
Compression (mm)	38.4	37.2	10.7
Viscous criterion (m/s)	0.28	0.11	0.06
Abdomen - Force (kN)	-	-	0.584
Pelvis - Force (kN)	-	-	1.01
Upper legs Force	4.36	1.61	
Left			
(kN) Right	0.91	1.17	
Knee displ (mm) Left	0.34	3.58	
Right	0.7	4.87	
Lower legs Force Left	1.4	1.31	
(kN) Right	2.07	1.34	
Index (Upper/Low) Left	0.46/0.26	0.25/0.33	
Right	0.44/0.69	0.39/0.27	

Modifiers for offset test scores

Head		No penalty
Chest		No penalty
Upper leg	Variable & conc. loading	2 pt penalty L & R
Lower leg		No penalty
Foot score	Brake pedal rearward	Score 4 pts

Pedestrian rating



16.03 points out of 36 (44.5%)

Child head impacts 7.992 pts; adult head impacts 5.756 pts; Upper leg zero pts and lower leg impacts 2.28 pts.

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