

Crash Tests

New Car Safety

Toyota Hiace

07/2005 on 09/2011 - Dual Frontal

Overall Evaluation



Overall Score
Variant: LWB Van

23.5 out of 37
Engine: 2.7 Litre
Category: Van

Model History and Safety Features

The tested model of Toyota Hiace was introduced in Australia during 2005.

Dual front airbags are standard equipment. ABS brakes are optional. Side airbags and electronic stability control are not available.

Pre-tensioners are fitted to the front seat belts to reduce slack in the event of a crash. A two point seat belt is fitted to the centre front seat. This provides inferior protection compared with a three point seat belt.

Overall Evaluation: 3

The Hiace scored 7.50 out of 16 in the offset crash test. The passenger compartment held its shape reasonably well. Protection from serious chest and leg injury was marginal for the driver. Foot protection was poor.

The vehicle was awarded a default score of 16 out of 16 in the side impact crash test.

Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 3 pts, chest 2.50 pts, upper legs 2 pts, lower legs zero pts.

The passenger compartment held its shape reasonably well, except for footwell deformation. The brake pedal moved rearwards by 260 mm and upwards 115 mm. The steering wheel hub moved rearwards 30 mm, upwards 144 mm and sideways 17 mm. The front ("A") pillar moved 81 mm rearwards. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

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 knees. The passenger's head was cushioned by the airbag.

Side Impact Crash Test

Default 16 points awarded for side impact test.

The side impact test normally used by ANCAP simulates a 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 Hiace. Experience shows that such vehicles can be expected to perform well in this test so ANCAP has decided to award full score for these vehicles instead of conducting a crash test.

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.

Pedestrian rating (v4.1)



Child head impacts 1.53
Adult head impacts 5.00
Upper leg impacts Zero
Lower leg impacts Zero
Total (out of 36) 6.53

Offset crash test at 64km/hr



Injury Measurements

Refer to the information sheet 'How the tests are done'	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test aa 50km/h (v4.1) Driver
	Driver	Passn	
Head			
- HIC	403	274	
- Acceleration (g for 3ms)	56.4	40.4	
Neck			
- Shear (kN)	0.36	0.92	
- Tension (kN)	1.19	1.31	
- Extension (Nm)	34.2	11.2	
Chest			
- Acceleration (g for 3ms)	44.1	33.5	
- Compression (mm)	32.5	26.3	
- Viscous Criterion (m/s)	0.2	0.1	
Abdomen			
- Force (kN)			
Pelvis			
- Force (kN)			
Upper Legs Force (kN)			
- Left	0.3	0.23	
- Right	0.41	0.95	
Knee Displacement (kN)			
- Left	0.48	3.91	
- Right	0.04	0.67	
Lower Legs Force (kN)			
- Left	0.86	1.07	
- Right	2.37	1.25	
Index (Upper Lower)			
- Left	0.5 0.66	0.28 0.23	
- Right	0.66 0.62	0.31 0.22	

Bonus points (maximum 5)

Pole Test: Zero points

Seat Belt Reminders: None fitted - zero points

Modifiers for offset test scores

Head	Steer wheel upward	1 pt deduction
Chest		No deduction
Upper leg	Variable & concentrated loading	2 pt deduction L & R
Lower leg	Brake pedal upward	1 pt deduction
Foot score	Brake pedal rearward	Score 0 points
Structure		

Modifiers for side impact test scores

Head
Chest
Upper leg
Lower leg
Foot score
Structure



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