

# Crash Tests

## New Car Safety

### TOYOTA HIACE

2005 on

Dual front airbags

#### Occupant Protection



**Occupant Protection Score 23.50 out of 37**

Variant: LWB Van Eng: 2.7 litre manual

Kerb weight: 1700 kg Category: VAN

Vehicle built: 03/06

#### 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.

#### OCCUPANT PROTECTION: 3 Stars

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.

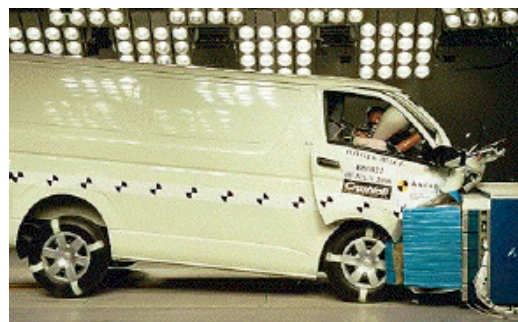
The airbag cushioned the head of the driver and contact was stable. Steering column components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag.

#### 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.



Offset crash test at 64km/h

#### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passn	Driver
Head HIC	403	274	Default Score awarded
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 Accln (g for 3ms)	44.10	33.50	
Compression (mm)	32.50	26.30	
Viscous criterion (m/s)	0.20	0.10	
Abdomen - Force (kN)	-	-	
Pelvis - Force (kN)	-	-	
Upper legs Force Left (kN)	0.30	0.23	
Right	0.41	0.95	
Knee displ (mm) Left	0.48	3.91	
Right	0.04	0.67	
Lower legs Force Left (kN)	0.86	1.07	
Right	2.37	1.25	
Index (Upper/Low) Left	0.50 / 0.36	0.28 / 0.23	
Right	0.66 / 0.62	0.31 / 0.22	

#### Bonus points (maximum 5)

Pole Test: Not eligible      Seat belt reminders: None fitted

#### Modifiers - offset test scores

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

#### PEDESTRIAN PROTECTION RATING (v4.1)

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



**ANCAP**

Crash testing for safety

AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

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