

# Crash Tests

## New Car Safety

### TOYOTA KLUGER GRANDE

2003 on Front+side & head airbags

Occupant Protection 

**Occupant Protection Score 28.43 out of 37**

Variant: Grande Eng: 3.3L V6  
 Kerb weight: 1800 kg Category: 4WD - COMPACT  
 Vehicles built: Feb05

#### Model History and Safety Features

The Toyota Kluger was introduced in Australia during 2003. Dual front airbags, side airbags and head-protecting side curtains are standard equipment on the Grande variant. ABS/EBD brakes and electronic stability control are also standard on this variant. Side airbags, side curtains and electronic stability control are part of an optional safety pack on the CVX variant and this assessment also applies to Klugers with the safety pack. A separate assessment covers the CVX variant without the safety pack.

The front seat belt buckles are mounted on the seats and the upper anchorages are adjustable. These features improve the fit of the seat belt. Pre-tensioners 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 seat belt.

#### OCCUPANT PROTECTION: 4 Stars

The Toyota Kluger Grande scored 10.43 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest and leg injury was marginal for the driver.

The vehicle was awarded a default score of 16 out of 16 in the side impact crash test. A further 2 points were scored in the optional pole test

#### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 2.14 pts, upper legs 2pts, lower legs 2.29 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 106 mm and downwards 23mm. The steering wheel hub moved rearwards 18 mm, upwards 52 mm and sideways 29 mm. The front ("A") pillar moved 15 mm rearwards. All doors remained closed during the crash. After the crash moderate manual effort was 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. The passenger's knees hit the glove box and dash.

#### 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 Kluger. Such vehicles can be expected to perform well in this particular side impact test so ANCAP has decided to award full score for these vehicles instead of conducting a crash test.



Offset test at 64km/h

The Grande variant of the Kluger has head-protecting side curtain airbags as standard. ANCAP conducted a pole test and the vehicle earned the maximum two points.

#### 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 (v)
	Driver	Passn	Driver
Head HIC	487	228	Default score awarded
Acceleration (g for 3ms)	57.2	40.9	
Neck - Shear (kN)	0.30	0.70	
Tension (kN)	1.69	1.26	
Extension (Nm)	30.7	34.4	
Chest Accln (g for 3ms)	43.800	35.600	
Compression (mm)	35.00	25.90	
Viscous criterion (m/s)	0.19	0.11	
Abdomen - Force (kN)	-	-	
Pelvis - Force (kN)	-	-	
Upper legs Force Left (kN)	0.41	1.06	
Right (kN)	0.42	1.05	
Knee displ (mm) Left	1.43	3.13	
Right	0.96	1.54	
Lower legs Force Left (kN)	4.57	2.22	
Right (kN)	2.79	2.48	
Index (Upper/Low) Left	0.44 /0.68	0.42 /0.27	
Right	0.38 /0.49	.5/ .61	

#### Bonus points (maximum 5)

Pole Test: 2pts Seat belt reminders: None

#### Modifiers - offset test scores

Head No deduction  
 Chest No deduction  
 Upper leg Variable & conc. loading 2pt deduction R  
 Variable loading 1pt deduction L  
 Lower leg No deduction  
 Foot score Score 3.76 points

#### Modifiers - side impact test scores

No test conducted

#### PEDESTRIAN PROTECTION RATING

No pedestrian protection tests were conducted by ANCAP.



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