

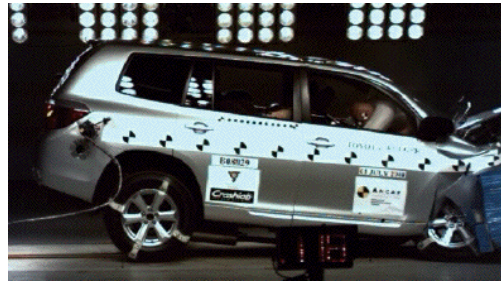
Crash Test Results

New Car Safety

TOYOTA KLUGER/HIGHLANDER

March 2008 on

Front, side+head & knee airbags



Offset crash test at 64km/h



ANCAP
Rated ★★★★★

Occupant Protection

Occupant Protection Score 33.31 out of 37

Variant: KX-R 5 Seat 2WD

Eng: 3.5 litre V6

Kerb weight: 1840 kg

Category: 4WD - LARGE

Vehicles built: 3/08 & 7/07

Model History and Safety Features

The tested model of Toyota Kluger/Highlander was introduced in Australia during 2007. This assessment applies to 2WD and 4WD Klugers built from March 2008.

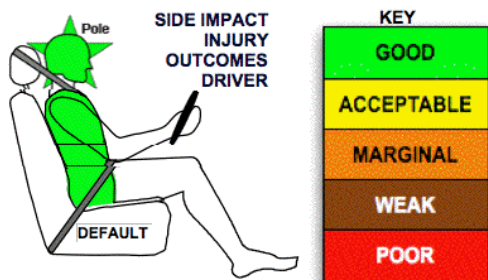
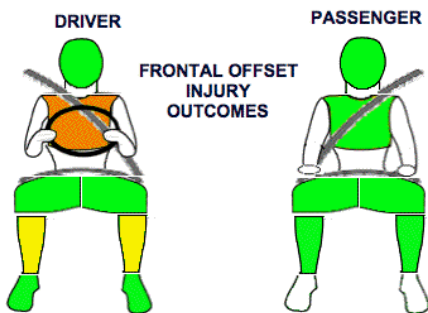
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD), electronic stability control (ESC) and a rear-view camera are also standard. Advanced seat belt reminders are fitted to both front seats.

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. Pretensioners 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 (lap) seat belt.

OCCUPANT PROTECTION: 5 Stars

The Kluger/Highlander scored 13.31 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest 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 earned in the optional pole test.



FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4 pts, chest 1.89 pts, upper legs 4 pts, lower legs 3.42 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved forwards by 9 mm and downwards 14mm. The steering wheel hub moved 10mm forward and 49 mm sideways. The front ("A") pillar moved 3 mm rearwards. All doors remained closed during the crash. After the crash the driver's door could be opened with high manual effort. The airbag cushioned the head of the driver and contact was stable. The knee airbag protected the driver's knees.


SIDE IMPACT CRASH TEST (v4.1)

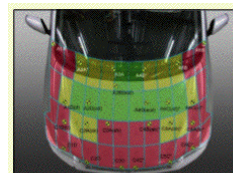
Body region scores out of 4 points each: Head 4 pts, chest 4 pts, abdomen 4 pts, pelvis 4 pts.

The side impact test normally used by ANCAP simulates a small car striking the driver's door of the vehicle under test. Experience shows that high vehicles like the Kluger 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 eligible for an optional pole impact test and the manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

PEDESTRIAN PROTECTION: 1 Star

There was some protection for the adult head impacts, with pass scores in the central region of the bonnet. However, child head protection was generally poor. Results for the upper leg and full leg tests were all poor. Toyota recently participated in a joint research program on pedestrian safety with ANCAP's test contractor in Adelaide and is already designing future models to meet forthcoming Global Technical Regulations on pedestrian protection.

PEDESTRIAN PROTECTION		
 v4.1 Rated ★★★★★	Child head impacts	0.79
	Adult head impacts	7.93
	Upper leg impacts	Zero
	Lower leg impacts	Zero
	Total (out of 36)	8.72



Child and adult head impact



Adult leg impact (upper and full legforms)

pass marginal fail

September 2008

PO Box 4041

Manuka ACT 2603

kluger08.doc

Issued 26/9/2008



ANCAP

Crash testing for safety

AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - TOYOTA KLUGER/HIGHLANDER - March 2008 on

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.1)
	Driver	Passenger	Driver
Head HIC	356	327	Default score awarded
Acceleration (g for 3ms)	44.6	43.3	
Neck – Shear (kN)	0.37	0.67	
Tension (kN)	1.80	1.39	
Extension (Nm)	29.1	21.8	
Chest Accln (g for 3ms)	40.100	42.900	
Compression (mm)	36.80	21.60	
Viscous criterion (m/s)	0.19	0.12	
Abdomen – Force (kN)	-	-	
Pelvis – Force (kN)	-	-	
Upper legs Force (kN) Left	1.98	2.16	
Right	1.60	3.30	
Knee displ (mm) Left	2.89	2.86	
Right	1.75	5.55	
Lower legs Force (kN) Left	2.24	1.45	
Right	2.45	1.91	
Index (Upper/Low) Left	0.27/0.17	0.23/0.24	
Right	0.44/0.53	0.36/0.2	

Bonus points (maximum 5)

Pole Test: 2 pts

Seat belt reminders: 2 (see table below for details)

Modifiers - deductions from offset test scores

Head No deduction

Chest No deduction

Upper leg Variable & conc. loading No deduction

Lower leg No deduction

Foot score Score 4 points

Note: Steering column and pedal movements are measured relative to the driver's seat.

Modifiers - deductions from side impact test scores

Default score

Safety features

These specifications are subject to change. Please check with manufacturer for the latest specifications.



Driver airbag	S	Antilock (ABS) brakes / Electronic brakeforce distribution / Brake Assist	S/S/S
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	S#
Side airbags, front seats - chest protection	S	3 point centre rear seat belt	S
Side airbags, front seats - head protection	S	Active head restraints - front seats	S
Side airbags, rear seats - head protection	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	S	Intelligent seat belt reminder – front passenger	S
Seat belt pretensioners (Front/rear outboard)	S/X	Rear seat belt status indicator	X

Key:

S = standard on all variants

O = optional on base variant. May be standard on higher variants

V= not available on base variant but standard or optional on higher variants

X = not available on any variant

ESC required by ANCAP for 5 star rating from 2008