## **Crash Test Results**

# New Car Safety JEEP GRAND CHEROKEE

#### From 2011 Front+side+head+knee airbags



Occupant Protection Score29.95 out of 37Variant: LimtedEng: 3.0 dieselKerb mass 2330 kgCategory: SUV - LARGE

Vehicles built: 2011 Tested by Euro NCAP

**Important note**: The *diesel left-hand-drive* European model was tested by Euro NCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

#### **Model History and Safety Features**

The tested model of Jeep Grand Cherokee was introduced in Australia and New Zealand during 2011. This ANCAP rating currently only applies to diesel variants of the Grand Cherokee. Further technical information is being sought about other variants.

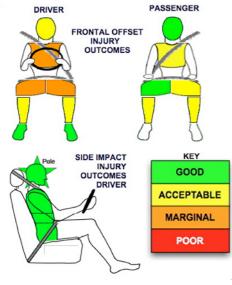
Dual front airbags, side airbags, head-protecting side curtains and driver knee airbag are standard equipment. Antilock brakes (ABS), electronic brakeforce distribution (EBD) and electronic stability control (ESC) are also standard. Intelligent seat belt reminders are fitted to both front seats.

Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash.

#### **OCCUPANT PROTECTION: 4 Stars**

The Grand Cherokee scored 9.95 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 scored 16 out of 16 in the side impact crash test and a further two points in the pole test.





#### Offset crash test at 64km/h FRONTAL OFFSET CRASH TEST

*Body region scores out of 4 points each*: Head/neck 3 pts, chest 1.88 pts, upper legs 2 pts, lower legs 3.07 pts.

The passenger compartment held its shape well in the offset crash test. The park brake pedal moved rearwards by 29 mm and upwards 5 mm. The steering wheel hub moved 52mm forward, 38mm downward and 5 mm sideways. The front ("A") pillar moved 7 mm rearwards. All doors remained closed during the crash. After the crash all doors could be opened with normal effort. The airbag cushioned the head of the driver but Euro NCAP found that the airbag bottomed out and applied a one point deduction. Despite the driver knee airbag, dash components were found to be a potential source of injury for the driver and passenger knees. Euro NCAP also noted that there was a seat slide mechanism failure. ANCAP applies a one point deduction for these failures.

#### SIDE IMPACT CRASH TEST

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

The side impact test simulates a small car striking the driver's door of the vehicle under test. Experience shows that high vehicles like the Grand Cherokee can be expected to perform well in this test and it scored full marks. The vehicle was eligible for a pole impact test, since it had head-protecting side airbags. The vehicle earned the maximum two points in this test.

#### **PEDESTRIAN PROTECTION: Marginal**

The bumper provided good protection in all areas tested and scored maximum points. However, the front edge of the bonnet was poor in all areas tested. In almost all areas likely to be struck by the head of a child, the bonnet provided poor protection. However, protection provided to an adult's head was mixed with areas of good and poor protection.

PEDESTRIAN PROTECTION	Child head impacts	1.58		
MARGINAL	Adult head impacts	8.48		
	Upper leg impacts	Zero		
Tested by Euro NCAP vXX	Lower leg impacts	6		
	Total (out of 36)	16.06		
PASS				



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### **TECHNICAL DATA - JEEP GRAND CHEROKEE - From 2011**

#### **INJURY MEASUREMENTS**

Body region		Offset Crash Te (v5.	Side Impact Crash Test at 50km/h (v)	
		Driver	Passenger	Driver
Head HIC		301	332	10
Acceleration (g for 3ms)		48.4	48.4	12.5
Neck - Shear (kN)		0.61	0.34	-
Tension (kN)		0.67	0.91	-
Extension (Nm)		18.7	20.7	-
Chest Accln (g for 3ms)		-	-	-
Compression (mm)		29.81	22.78	8.21
Viscous criterion (m/s)		0.11	0.07	0.02
Abdomen - Force (kN)		-	-	0.160
Pelvis - Force (kN)		-	-	0.360
Upper legs Force (kN)	Left	0.23	1.80	
	Right	0.68	0.00	
Knee displ (mm)	Left	0.40	4.70	
	Right	0.10	0.00	
Lower legs Force (kN)	Left	2.01	2.63	
-	Right	2.59	2.25	
Index (Upper/Low)	Left	0.37 /0.17	0.50 /0.55	
,	Right	0.40 /0.61	.44/.3	

#### Bonus points (maximum 5)

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

#### Modifiers - deductions from offset test scores Airbag bottomed out

1 pt deduction 1 pt deduction Seat slide mechanism failure\* Upper leg Variable & conc. loading 2 pt deduction Left & Right No deduction Score 4 points

Foot score \* ANCAP modifier not applied by Euro NCAP

#### Modifiers - deductions from side impact test scores Chest No deduction

#### Safety features

Head

Chest

Lower leg

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

Driver airbag	S	Antilock (ABS) brakes / Electronic brake 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 seat belt for all forward-facing seats	S
Side airbags, front seats - head protection	S	Whiplash protection (RCAR protocol)	Pending
Side airbags, rear seats - head protection		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	Intelligent seat belt reminder - rear seats	Х

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



