

Crash Test Results

New Car Safety

KIA CERATO

2009 on Front+side+head airbags



Offset crash test at 64km/h

FRONTAL OFFSET CRASH TEST (v4.1)

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.55 pts, upper legs 0.39 pts, lower legs 1.69 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 124 and upwards 20 mm. The steering wheel hub moved 56 mm rearward, 1 mm upward and 13 mm sideways. The front ("A") pillar moved 42 mm rearwards. All doors remained closed during the crash. After the crash the driver door could be opened with high manual effort.

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. A production change introduced after the crash test has improved knee protection in this area but some concerns remain. The passenger's head was cushioned by the airbag.

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.

Although side curtain airbags were fitted the vehicle was not eligible for a Pole Impact Test since it was not within reach of a 5 star rating. This test can earn eligible vehicles an extra two points.

PEDESTRIAN PROTECTION: 2 Stars

The majority of the child head test area scored well. More work is required to improve the adult head test area. Improvements need to be made to both leg contact areas.

Occupant Protection Score 26.63 out of 37

Variant: S sedan Eng: 2 litre
Kerb weight: 1250 kg Category: CAR - SMALL
Vehicles built: Dec 2008

Model History and Safety Features

The tested model of Kia Cerato was introduced in Australia early in 2009.

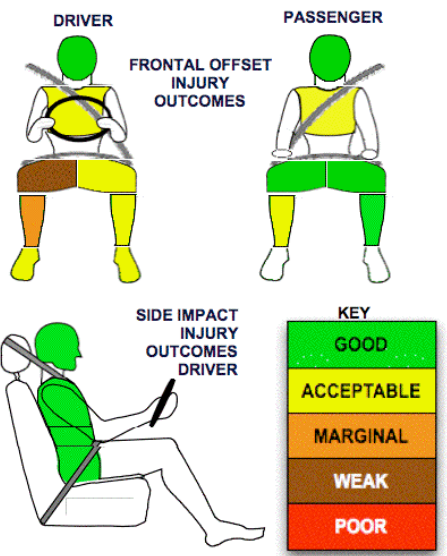
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) with Emergency Brake Assist is also standard. Electronic Stability Control (ESC) is standard in New Zealand and on the SLi variant in Australia. ESC is optional on the S variant. An advanced seat belt reminder is fitted to the driver seat.


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.

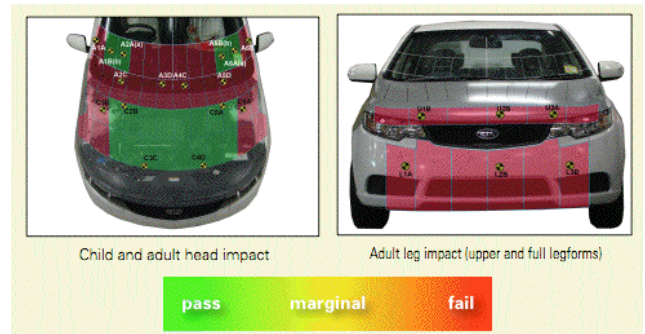
OCCUPANT PROTECTION: 4 Stars

The Cerato scored 9.63 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a moderate risk of serious leg injury was for the driver.

The vehicle scored 16 out of 16 in the side impact crash test.



PEDESTRIAN PROTECTION			
 v4.1	Rated ★ ★ ★ ★	Child head impacts	8
		Adult head impacts	2
		Upper leg impacts	Zero
		Lower leg impacts	Zero
		Total (out of 36)	10



June 2009

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Issued 3/6/2009



TECHNICAL DATA - KIA CERATO - 2009 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	51	37	75
Acceleration (g for 3ms)	415.0	228.0	28.9
Neck - Shear (kN)	0.37	0.58	-
Tension (kN)	1.52	0.93	-
Extension (Nm)	10.0	19.2	-
Chest Accln (g for 3ms)	46.600	32.900	-
Compression (mm)	25.16	24.80	20.50
Viscous criterion (m/s)	0.06	0.08	0.12
Abdomen - Force (kN)	-	-	0.816
Pelvis - Force (kN)	-	-	2.250
Upper legs Force (kN)			
Left	0.67	0.33	
Right	5.92	2.44	
Knee displ (mm)			
Left	4.02	0.53	
Right	5.37	1.74	
Lower legs Force (kN)			
Left	2.74	1.98	
Right	1.95	2.30	
Index (Upper/Low)			
Left	0.25 /0.31	0.34 /0.33	
Right	0.49 /0.92	0.36/0.25	

Bonus points (maximum 5)

Pole Test: Not eligible due to low offset test score

Seat belt reminders: 1 (see table below for details)

Modifiers - deductions from offset test scores

Head No deduction
 Chest No deduction
 Upper leg Variable & conc. loading 2 pt deduction* Right
 1 pt deduction Left
 Lower leg No deduction
 Foot score Pedal rearward Score 3.02 points

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

* 0.5 point deduction with improved design of steering column but star rating is unchanged

Modifiers - deductions from side impact test scores

Chest No deduction

Safety features

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)	O# (S NZ)
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	X	Intelligent seat belt reminder - front passenger	X
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



