Crash Test Results

New Car Safety

HYUNDAI SANTA FE (LHD)

Oct 2009 on Front+side+head airbags



Occupant Protection

Occupant Protection Score 33.34 out of 37

Variant: GLS 4WD Eng: 2.2 diesel

Kerb weight: 1790 kg Category: 4WD - LARGE

Vehicles built: 2006 & 2009 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 Hyundai Santa Fe was introduced in Australia during 2006. This 5-star rating applies to 2.2 diesel and 2.4 petrol variants built from October 2009, when several safety-related upgrades were introduced.

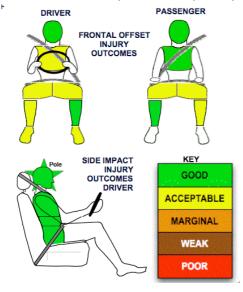
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. The side curtains are designed to deploy in a rollover crash. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Advanced seat belt reminders are fitted to the driver and front passenger seats

Pre-tensioners are fitted to the front seat belts to reduce slack in the event of a crash. Three point seat belts are fitted to all seats. These provide better protection than a two point (lap) seat belt.

OCCUPANT PROTECTION: 5 Stars

The upgraded Santa Fe scored 13.34 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serous chest and leg injury for the driver

The vehicle scored 16 out of 16 in the side impact crash test and a further two points in the optional pole test.





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 2.70 pts, upper legs 3 pts, lower legs 3.64 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 99 mm and downwards 3mm. The steering wheel hub moved forwards 10mm, downwards 17mm and sideways 2 mm. The front ("A") pillar moved 13 mm rearwards. All doors remained closed during the crash. After the crash high manual effort were required to open the driver's door.

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

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.

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

The vehicle was eligible for an optional pole impact test and this was conducted by Euro NCAP. The curtain did not deploy fully and one point was deducted by Euro NCAP. The curtain system was upgraded and ANCAP was provided with evidence that the deployment problem had been rectified so a full 2 points was awarded for the upgraded vehicle.

PEDESTRIAN PROTECTION: 1 Star

The original Santa Fe earned zero stars from Euro NCAP. ANCAP conducted additional tests of the upgraded vehicle and it improved to one star.



ANCAP v4.2

Child head impacts	4
Adult head impacts	2.89
Upper leg impacts	Zero
Lower leg impacts	Zero
Total (out of 36)	6.89



November 2009

PO Box 4041 Manuka ACT 2603 santafe09.doc Issued 18/11/2009



PROGRAM

TECHNICAL DATA - HYUNDAI SANTA FE - October 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		237	193	13	
Acceleration (g for 3ms)		38.0	36.0	14.7	
Neck - Shear (kN)		0.40	0.23	-	
Tension (kN)		1.36	0.66	-	
Extension (Nm)		14.0	12.4	-	
Chest Accln (g for 3ms)		-	-	-	
Compression (mm)		31.12	19.21	16.91	
Viscous criterion (m/s)		0.17	0.05	0.08	
Abdomen - Force (kN)		-	-	0.470	
Pelvis - Force (kN)		-	1	0.870	
Upper legs Force (kN)	Left	2.79	3.42		
	Right	2.17	0.46		
Knee displ (mm)	Left	0.20	3.60		
	Right	0.00	1.00		
Lower legs Force (kN)	Left	0.89	2.23		
	Right	2.08	1.33		
Index (Upper/Low)	Left	0.22 /0.18	0.23 /0.33		
	Right	0.33 /0.16	0.36/0.27		

Bonus points (maximum 5)

Pole Test: 2 pts*

Seat belt reminders: 2 pts*

Modifiers - deductions from offset test scores

Head No deduction Chest No deduction

Upper leg Variable contact

0.5 pt deduction Left & Right driver*

1 pt deduction, Left & Right passenger*

Lower leg No deduction Foot score Score 4 points * Improved since 2006 rating by Euro NCAP

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.

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 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 (both rows)	Intelligent seat belt reminder - driver	S
Driver knee airbag	Х	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/Rear outboard)	S/X	Rear seat belt status indicator	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



