

Crash Test Results

New Car Safety

HYUNDAI i45

Sep 2010 on Front+side+head airbags



Offset crash test at 64km/h

FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4.0 pts, chest 3.46 pts, upper legs 4.0 pts, lower legs 3.11 pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 40 mm. The accelerator pedal moved upwards 38 mm. The steering wheel hub moved 40mm forward, 6 mm upward and 3 mm sideways. The front ("A") pillar moved 17 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 and contact was stable. There were no knee hazards. The passenger's head was cushioned by the airbag.

SIDE IMPACT CRASH TEST

Body region scores out of 4 points each: Head 4.0 pts, chest 2.96 pts, abdomen 4.0 pts, pelvis 4.0 pts.

The vehicle was eligible for an optional pole impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

PEDESTRIAN PROTECTION: MARGINAL

The i45 obtained good results for two thirds of the child head area and a third of the adult head area. It received partial points for the full leg, but performed poorly in the upper leg tests.



Occupant Protection Score 33.53 out of 37

Variant: - Eng: 2.4 litre
Kerb weight: 1500 kg Category: CAR - MEDIUM
Vehicles built: 2010

Model History and Safety Features

The tested model of Hyundai i45 was introduced in Australasia during 2010. This rating applies to all i45 built from September 2010, when several production changes were introduced.

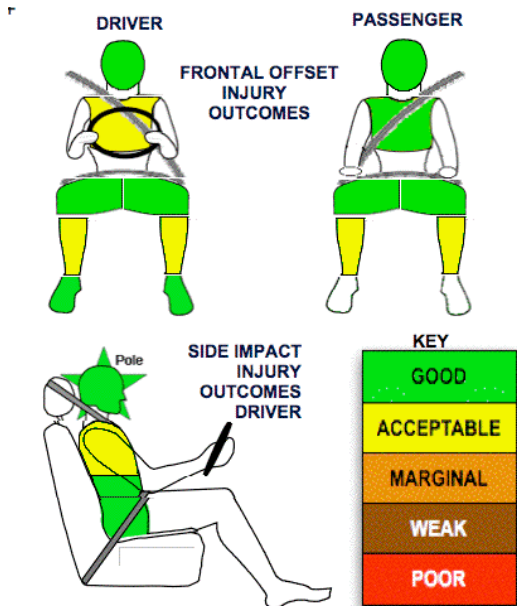
Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD), emergency brake assist and electronic stability control (ESC) are also standard. Advanced seat belt reminders are fitted to both front seats.

Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash. A three point seat belt is fitted to the centre rear seat. This provides better protection than a two point (lap) seat belt.

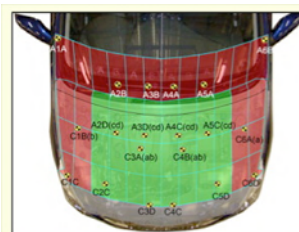
OCCUPANT PROTECTION: 5 Stars

The HYUNDAI i45 scored 14.57 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious chest and leg injury for the driver and a slight risk of lower leg injury for the passenger.

The vehicle scored 14.96 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver.



PEDESTRIAN PROTECTION	Child head impacts	8
MARGINAL	Adult head impacts	4
	Upper leg impacts	Zero
	Lower leg impacts	2.2
	Total (out of 36)	14.2



Child and adult head impact



Adult leg impact (upper and full legforms)

November 2010

PO Box 4041
Manuka ACT 2603
i45_10.DOC
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TECHNICAL DATA - HYUNDAI i45 - Sep 2010 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	194	261	35
Acceleration (g for 3ms)	37.0	43.0	18.6
Neck - Shear (kN)	0.54	0.37	-
Tension (kN)	1.19	0.63	-
Extension (Nm)	11.1	13.3	-
Chest Accln (g for 3ms)	35.80	29.90	-
Compression (mm)	25.78	19.20	9.80
Viscous criterion (m/s)	0.08	0.08	0.03
Abdomen - Force (kN)	-	-	0.93
Pelvis - Force (kN)	-	-	2.14
Upper legs Force (kN)			
Left	0.85	0.36	
Right	0.53	0.35	
Knee displ (mm)			
Left	0.12	0.19	
Right	1.80	0.00	
Lower legs Force (kN)			
Left	1.82	2.32	
Right	2.31	2.21	
Index (Upper/Low)			
Left	0.31 /0.48	0.24 /0.24	
Right	0.27 /0.60	0.28/0.25	

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 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

Chest T12 spine load 1.04 point 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)	S#
Side airbags, front seats - chest protection	S	3 point centre rear seat belt	S
Side airbags, front seats - head protection	S	Whiplash protection	Pending
Side airbags, rear seats - head protection	S	Intelligent seat belt reminder - driver	S
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	S
Seat belt pretensioners (Front/rear outboard)	S/X	Intelligent seat belt reminder - rear seats	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