

# Crash Test Results

## New Car Safety

### MAHINDRA PIK-UP 4x4

From July 2009

Dual front airbags\*



Offset crash test at 64km/h

#### FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck Zero pts, chest 1 pts, upper legs 1.39 pts, lower legs Zero pts.

The passenger compartment lost structural integrity in the offset crash test. The throttle pedal moved rearwards by 298 mm and upwards 137 mm. The steering wheel hub moved 62 mm rearward, 104 mm upward and 18 mm sideways. The front ("A") pillar moved 104 mm rearwards. All doors remained latched during the crash. After the crash the driver's door could be opened with high manual effort. The tailshaft moved sideways and dented the fuel tank.

The airbag was still deploying when the driver's head contacted it. This increased the risk of serious head and neck injury. 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. Dash components were also a potential source of injury for the passenger's knees.

#### SIDE IMPACT CRASH TEST

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

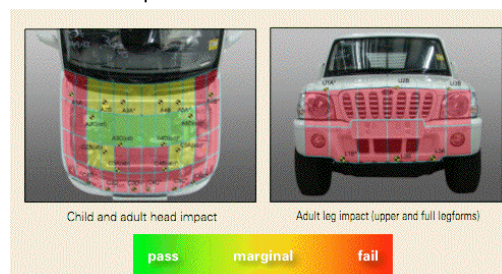
The side impact test normally used by ANCAP simulates a small car striking the driver's door of the vehicle under test. It is based on a regulation test but the regulation does not apply to vehicles with a high seat height like the Pik-up. Experience shows that such vehicles can be expected to perform well in this test so ANCAP has decided to award full score for these vehicles instead of conducting a crash test.

#### PEDESTRIAN PROTECTION: MARGINAL

PEDESTRIAN PROTECTION	Child head impacts	0.32
<b>MARGINAL</b>	Adult head impacts	6.57
	Upper leg impacts	Zero
	Lower leg impacts	Zero
	Total (out of 36)	6.89

version 4.1\*

\* Based on tests to a previous protocol. Scores might vary under the latest test protocol.



Occupant Protection

Occupant Protection Score 16.49\* out of 37

\* High risk of life-threatening head & neck injury in offset test

Variant: Dual cab 4x4 Eng: 2.2 diesel

Kerb mass: 2150 kg Category: UTILITY

Test vehicle built: 2011

#### Model History and Safety Features

The Mahindra Pik-Up was introduced in Australia during 2007. This ANCAP rating applies to 4x4 Dual Cab Pik-Ups built from July 2009, when several production changes were introduced for Australasia.

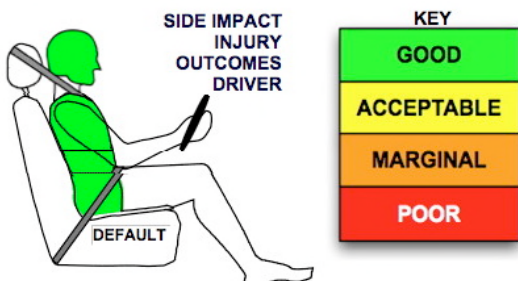
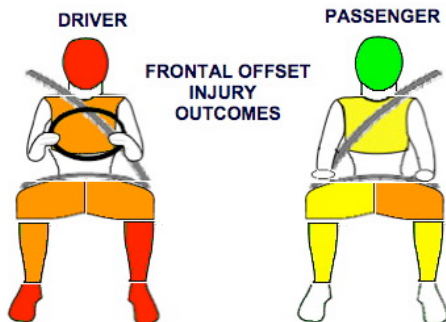
Dual front airbags and antilock brakes (ABS), are standard. Electronic stability control (ESC) is not available.

Pretensioners are fitted to the front seat belts to reduce slack in the event of a crash. There are no top tether anchorages for child restraints so this vehicle is unsuitable for transporting children under the age of four.

#### OCCUPANT PROTECTION: 2 Stars

The Mahindra Pik Up scored 2.39 out of 16 in the offset crash test. The passenger compartment lost structural integrity. There was a high risk of serious head, leg and foot injury for the driver.

The vehicle was awarded a default score of 16 out of 16 in the side impact crash test.



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**ANCAP**

Crash testing for safety

AUSTRALASIAN  
NEW CAR ASSESSMENT  
PROGRAM

# TECHNICAL DATA - MAHINDRA PIK-UP - From July 2009

## INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v4.1)		Side Impact Crash Test at 50km/h (v4.2)
	Driver	Passenger	Driver
Head HIC	1,266	554	Default score awarded
Acceleration (g for 3ms)	98.4	58.5	
Neck - Shear (kN)	1.14	0.46	
Tension (kN)	4.06	0.56	
Extension (Nm)	61.8	10.3	
Chest Accln (g for 3ms)	54.00	41.10	
Compression (mm)	35.45	30.50	
Viscous criterion (m/s)	0.23	0.19	
Abdomen - Force (kN)	-	-	
Pelvis - Force (kN)	-	-	
Upper legs Force (kN)			
Left	2.49	0.66	
Right	4.60	1.91	
Knee displ (mm)			
Left	2.80	1.76	
Right	2.64	1.19	
Lower legs Force (kN)			
Left	6.17	2.01	
Right	4.76	2.22	
Index (Upper/Low)			
Left	1.10 /0.48	0.39 /0.29	
Right	0.83 /0.95	0.5/0.69	

### Bonus points (maximum 5)

Pole Test: Not eligible

Seat belt reminders: None (see table below for details)

### Modifiers - deductions from offset test scores

Head: Airbag and steering wheel concerns 2 pt deduction

Chest: Loss of structure, A pillar movement 1.08 pt deduction

Upper leg: Variable & conc. loading 2 pt deduction left & right (driver)

2 pt deduction left & 1 pt deduction right for passenger

Lower leg: Pedal upward 1 pt deduction

Foot score: Pedal rearward & blocked Score zero points

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

### Modifiers - deductions from side impact test scores

Default score awarded

### Safety features from July 2009

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/X/X
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	X#
Side airbags, front seats - chest protection	X	3 point centre rear seat belt	X
Side airbags, front seats - head protection	X	Whiplash rating	Not Tested
Side airbags, rear seats - head protection	X	Intelligent seat belt reminder - driver	X
Driver knee airbag	X	Intelligent seat belt reminder - front passenger	X
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

