

Crash Test Results

New Car Safety

MAHINDRA XUV500

From 2012 Front+side+head airbags



ANCAP Occupant Protection
Rated ★★★★★

Occupant Protection Score 26 out of 37

Variant: AWD Eng: 2.2 diesel, manual
Kerb mass: 1918kg Category: SUV - MEDIUM
Vehicles built: 2012 onward

Model History and Safety Features

The tested model of the XUV500 was introduced in Australia during 2012. This ANCAP rating applies to the all-wheel-drive variant.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard.

OCCUPANT PROTECTION: 4 Stars

The XUV500 scored 10 out of 16 in the offset crash test. The passenger compartment lost structural integrity. Protection from serious leg injury was poor for the driver due to excessive rearward movement of the brake pedal.

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



Offset crash test at 64km/h

FRONTAL OFFSET CRASH TEST

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

The passenger compartment held its shape reasonably well in the offset crash test however the structure supporting the trans-fascia tube had partially separated from the A-pillar resulting in a structural modifier. The brake pedal moved rearwards by 258 mm and upwards 135 mm. The steering wheel hub moved 45 mm rearward, 135 mm upward and 8 mm sideways. The A-pillar moved 18 mm rearwards. The tailgate opened during the crash but Mahindra demonstrated that a software upgrade would eliminate this problem and so no modifier was applied. After the crash the driver's door could be opened with high manual effort. Contact with the driveshaft appears to have caused a rupture in the fuel line. The exhaust pipe contacted the fuel tank but did not cause a puncture.

The airbag cushioned the head of the driver and contact was stable. The passenger's head was cushioned by the airbag. There was concern about driver knee hazards but the components were just outside the assessment zone and so no modifiers were applied.

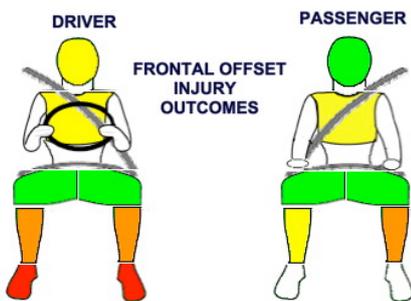
SIDE IMPACT CRASH TEST

The side impact test normally used by ANCAP simulates a small car striking the driver's door of the vehicle under test. Experience shows that large vehicles like the XUV500 can be expected to perform well in this test so ANCAP has decided to award a full score of 16 for these vehicles instead of conducting a crash test.

The manufacturer decided not to proceed with the optional Pole Impact Test.

PEDESTRIAN PROTECTION: Marginal

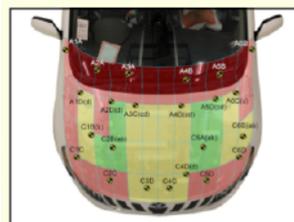
PEDESTRIAN PROTECTION	Child head impacts	3.23
MARGINAL v5.3	Adult head impacts	2.15
	Upper leg impacts	0
	Lower leg impacts	4.68
	Total (out of 36)	10.06



Whiplash Protection (RCAR Protocol)



KEY
GOOD
ACCEPTABLE
MARGINAL
POOR



Child and adult head impact



Adult leg impact (upper and full legforms)

pass marginal fail

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PO Box 4041
Manuka ACT 2603
xuv12.doc Rated: 2012
Revised 25/6/2012



ANCAP
Crash testing for safety
AUSTRALASIAN
NEW CAR ASSESSMENT
PROGRAM

TECHNICAL DATA - MAHINDRA XUV500 - From 2012

INJURY MEASUREMENTS

Body region	Offset Crash Test at 64km/h (v5.1)		Side Impact Crash Test at 50km/h (v5.1)
	Driver	Passenger	Driver
Head HIC	479	316	Default score awarded
Acceleration (g for 3ms)	63.9	40.5	
Neck - Shear (kN)	0.93	0.62	
Tension (kN)	1.46	1.54	
Extension (Nm)	33.0	21.6	
Chest Accln (g for 3ms)	54.0	27.0	
Compression (mm)	19.50	23.20	
Viscous criterion (m/s)	0.09	0.05	
Abdomen - Force (kN)	-	-	
Pelvis - Force (kN)	-	-	
Upper legs Force (kN)			
Left	1.23	0.08	
Right	1.93	1.58	
Knee displ (mm)			
Left	4.16	0.08	
Right	1.11	1.28	
Lower legs Force (kN)			
Left	1.90	1.34	
Right	2.68	2.02	
Index (Upper/Low)			
Left	0.53 /0.72	0.32 /0.91	
Right	0.61 /1.01	0.49/0.29	

Bonus points (maximum 5)

Pole Test: Not tested

Seat belt reminders: None comply with requirements

Modifiers - deductions from offset test scores

Head	Steering column movement	1 pt deduction
Chest	Loss of structure	1 pt deduction
Upper leg		No deduction
Lower leg	Pedal displacement	1pt deduction
Foot score	Pedal displacement	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

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

Feature	Standard	Additional Features	Rating
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 rating (RCAR protocol)	Good
Side airbags, rear seats - head protection	S	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