# **Crash Test Results**

**New Car Safety** 

## **MITSUBISHI LANCER**

WITH SIDE CURTAIN AIRBAGS

2007 on Front, side+head & knee airbags



Occupant Protection

Occupant Protection Score 33.56 out of 37

Variant: ES Sedan Eng: 2 litre, 5 speed manual Kerb weight: 1310 kg Category: SMALL CAR

Vehicles built: 2007

#### **Model History and Safety Features**

The tested model of Mitsubishi Lancer was introduced in Australia and New Zealand during 2007.

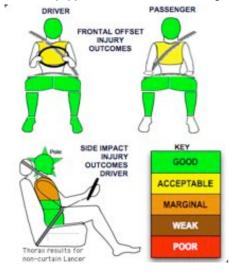
Dual front airbags and a driver knee airbag are standard equipment. Antilock brakes (ABS), electronic brake distribution (EBD) and electronic stability control (ESC) are also standard. Side airbags and head-protecting side curtains are standard on all New Zealand variants and the Australian VR and VRX variants. They are optional on the ES variants in Australia. Intelligent seat belt reminders are fitted to both front seats.

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: 5 Stars**

The Lancer scored 15.56 out of 16 in the offset crash test. The passenger compartment held its shape well. There was a slight risk of serious chest injury for the driver. All other injury measurements were good.

ANCAP tested the non-curtain Lancer, which scored 14 out of 16 in the side impact test. All injury measurements were good but the chest score was reduced due to unrealistic loading of the dummy's pelvis. The Lancer with side airbags could be expected to provide better protection. A further 2 points were earned in the optional pole test of a Lancer equipped with side curtain 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 3.56 pts, upper legs 4 pts, lower legs 4 pts.

The passenger compartment held its shape well in the offset crash test. The accelerator pedal moved rearwards by 86 mm. The clutch pedal moved upwards 24 mm. The steering wheel hub moved 14mm forward, 22 mm upward and 19 mm sideways. The front ("A") pillar moved 15 mm rearwards. All doors remained closed during the crash. After the crash the driver's door could be opened with normal effort

The airbag cushioned the head of the driver and contact was stable. The knee airbag protected the driver's knees from the risk of additional injury. The passenger's head was cushioned by the airbag.

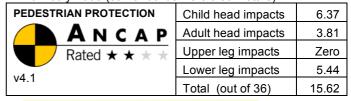
#### SIDE IMPACT CRASH TEST (v4.1)

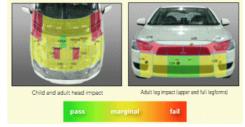
Body region scores out of 4 points each: Head 4 pts, chest 2 pts, abdomen 4 pts, pelvis 4 pts.

ANCAP side-impact tested the non-curtain Lancer (see separate rating). Those results were used in this assessment. Mitsubishi provided information to ANCAP which confirmed that the model with side (thorax) and curtain airbags provides better protection than the tested model. The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two points.

#### PEDESTRIAN PROTECTION: 2 Stars

The majority of adult and child head impacts scored partial points. The vehicle received zero points for the upper leg tests, and performed fairly well in the full leg to bumper tests. The tested bumper design applies to Lancers built from July 2008 (earlier builds were also 2 stars).





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## **TECHNICAL DATA - MITSUBISHI LANCER WITH CURTAINS - 2007 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		233	329	17
Acceleration (g for 3ms)		39.8	42.0	17.6
Neck - Shear (kN)		0.40	0.55	-
Tension (kN)		1.13	1.14	-
Extension (Nm)		19.1	14.6	-
Chest Accln (g for 3ms)		39.700	34.800	-
Compression (mm)		24.30	25.10	19.90
Viscous criterion (m/s)		0.11	0.08	0.14
Abdomen - Force (kN)		-	-	0.350
Pelvis - Force (kN)		-	-	1.810
Upper legs Force (kN)	Left	1.78	0.26	
	Right	0.98	0.85	
Knee displ (mm)	Left	3.59	0.31	
	Right	2.35	1.41	
Lower legs Force (kN)	Left	1.56	1.27	
	Right	1.80	1.40	
Index (Upper/Low)	Left	0.26 /0.25	0.25 /0.25	
	Right	0.28 /0.31	0.24/0.2	

<sup>\*</sup> Side impact results for non-curtain Lancer used for this assessment

#### **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 Variable & conc. loading 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 loading (moment) 2 pt deduction

## Safety features

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

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	O (S NZ)	3 point centre rear seat belt	S
Side airbags. front seats - head protection	O (S NZ)	Active head restraints - front seats	S
Side airbags. rear seats - head protection	O (S NZ)	Intelligent seat belt reminder - driver	S
Driver knee airbag	S	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



