

# Crash Tests

## New Car Safety

### Nissan Maxima

07/2006 on 11/2009 - Frontal+Side+Head

#### Overall Evaluation



#### Overall Score

Variant: Ti

30.09 out of 37

Engine: 3.5 Litre with CVT

Category: Medium Car

#### Model History and Safety Features

The tested model of Nissan Maxima with continuously variable transmission (CVT) was introduced in Australia during 2006.

Dual front airbags and side airbags are standard equipment. Head-protecting side curtains are standard on the tested Ti variant but are not available for the ST-L variant. ABS/EBD brakes, electronic stability control and active head restraints are standard on both variants.

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. Pre-tensioners 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 seat belt.

#### Overall Evaluation: 4

The Maxima scored 12.19 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious leg injury was marginal for the driver and passenger.

The vehicle scored 15.89 out of 16 in the side impact crash test. There was a slight risk of serious chest injury for the driver. The vehicle scored a further two points in the optional pole test.

#### Frontal Offset Crash Test

Body region scores out of 4 points each: Head/neck 4 pts, chest 3.88 pts, upper legs 2 pts, lower legs 2.31 pts.

The passenger compartment held its shape well in the offset crash test. The park brake pedal moved rearwards by 122 mm and upwards 47 mm. The steering wheel hub moved forwards 15mm, upwards 33 mm and sideways 5 mm. The front ("A") pillar moved 35 mm rearwards. All doors remained closed during the crash. After the crash high manual effort was required to open the driver's door.

The airbag cushioned the head of the driver and contact was stable. The side curtain also deployed. Steering column components were a potential source of injury for the driver's left knee. The passenger's head was cushioned by the airbag. The passenger's knees hit the glove box lid, which had a stiff structure behind the impact point.

#### Side Impact Crash Test

Body region scores out of 4 points each: Head 4 pts, chest 3.89 pts, abdomen 4 pts, pelvis 4 pts.

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 rating (v4.1)



|                    |      |
|--------------------|------|
| Child head impacts | 7.81 |
| Adult head impacts | 1.20 |
| Upper leg impacts  | 0.76 |
| Lower leg impacts  | Zero |
| Total (out of 36)  | 9.77 |

Offset crash test at 64km/hr



#### Injury Measurements

| Refer to the information sheet 'How the tests are done' | Offset Crash Test at 64km/h (v4.1) |             | Side Impact Crash Test aa 50km/h (v4.1) Driver |
|---------------------------------------------------------|------------------------------------|-------------|------------------------------------------------|
|                                                         | Driver                             | Passn       |                                                |
| Head                                                    |                                    |             |                                                |
| - HIC                                                   | 377                                | 209         | 41                                             |
| - Acceleration (g for 3ms)                              | 48.7                               | 39          | 24.4                                           |
| Neck                                                    |                                    |             |                                                |
| - Shear (kN)                                            | 0.75                               | 0.41        |                                                |
| - Tension (kN)                                          | 1.42                               | 0.78        |                                                |
| - Extension (Nm)                                        | 25.4                               | 21.5        |                                                |
| Chest                                                   |                                    |             |                                                |
| - Acceleration (g for 3ms)                              | 44.6                               | 31.6        |                                                |
| - Compression (mm)                                      | 20.6                               | 22.84       | 22.53                                          |
| - Viscous Criterion (m/s)                               | 0.1                                | 0.06        | 0.15                                           |
| Abdomen                                                 |                                    |             |                                                |
| - Force (kN)                                            |                                    |             | 0.886                                          |
| Pelvis                                                  |                                    |             |                                                |
| - Force (kN)                                            |                                    |             | 2.3                                            |
| Upper Legs Force (kN)                                   |                                    |             |                                                |
| - Left                                                  | 0.24                               | 0.33        |                                                |
| - Right                                                 | 0.04                               | 3.03        |                                                |
| Knee Displacement (kN)                                  |                                    |             |                                                |
| - Left                                                  | 0.12                               | 0.21        |                                                |
| - Right                                                 | 0                                  | 10.49       |                                                |
| Lower Legs Force (kN)                                   |                                    |             |                                                |
| - Left                                                  | 1.32                               | 1.78        |                                                |
| - Right                                                 | 1.79                               | 2.58        |                                                |
| Index (Upper   Lower)                                   |                                    |             |                                                |
| - Left                                                  | 0.42   0.41                        | 0.32   0.15 |                                                |
| - Right                                                 | 0.63   0.58                        | 0.78   0.29 |                                                |

#### Bonus points (maximum 5)

Pole Test: 2 points

Seat Belt Reminders: None fitted - zero points

#### Modifiers for offset test scores

|            |                          |
|------------|--------------------------|
| Head       | No deduction             |
| Chest      | No deduction             |
| Upper leg  | Variable & conc. loading |
| Lower leg  | 2 pt deduction L         |
| Foot score | No deduction             |
| Structure  | Park brake pedal         |
|            | Score 3.12 points        |

#### Modifiers for side impact test scores

|            |              |
|------------|--------------|
| Head       | No deduction |
| Chest      | No deduction |
| Upper leg  | No deduction |
| Lower leg  | No deduction |
| Foot score | No deduction |
| Structure  | No deduction |



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