

# Crash Tests

## New Car Safety

### NISSAN PULSAR

2000 on

Driver's airbag



Offset crash test at 64km/h

## Overall Evaluation



Overall score

15.15 out of 34

Variant: Sedan.  
Kerb weight: 1120 kg  
Vehicles built: May-00

Engine: 4 Cyl. 1.6 litre.  
Category: SMALL CAR

### Safety features

A driver's airbag is standard equipment. A passenger airbag is only available on the Ti variant.

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. Webbing grabbers are fitted to the front seat belts.

### OVERALL EVALUATION : 2 Stars

The NISSAN PULSAR performed poorly in the offset crash test (score 0.733 out of 16). The passenger compartment was substantially deformed. The driver's contact with the airbag was unstable and there was a risk of serious neck injury. Chest protection was marginal and leg protection was poor for the driver. The vehicle performed better in the side impact crash (score 14.41 out of 16).

### FRONTAL OFFSET CRASH TEST

The passenger compartment was substantially deformed in the offset crash test. The front part of the driver's floor was pushed rearwards 22cm and the sill was buckled. The brake pedal moved rearwards by 29cm. The dash moved 13cm towards the driver. The steering column moved rearwards 12cm and up 7cm. The roof buckled upwards above the driver and the width of the driver's doorway shortened by 15cm. All doors remained closed during the crash. After the crash tools were required to open the driver's door.

By the time the airbag inflated the steering column had moved back substantially and the driver's head was over the top of the steering wheel. The airbag inflated under the driver's chin, applying force to the neck and chest. Protection from serious neck and chest injury was marginal. The driver's left knee hit the steering column adjuster, which applied a localised load to the knee. Stiff components were located near both knee impact points.

The passenger's head came close to the dash but did not hit anything. Protection from serious chest injury was marginal. The passenger's knees hit the glove box and dash. A stiff, sharp bracket was located near the right knee impact point.

### SIDE IMPACT CRASH TEST

The centre pillar and the side doors were pushed inwards substantially. The driver's seat was pushed sideways but the anchorages held.

The back of the driver's head glanced the centre pillar. The head then rocked down towards the driver's shoulder.

The vehicle was not eligible for a Pole Impact Test since it did not have head-protecting side airbags. This test can earn eligible vehicles an extra two points, giving a maximum possible overall score of 34 points.

### INJURY MEASUREMENTS

Refer to the information sheet "How the test are done"	Offset Crash Test at 64km/h		Side Impact Crash Test at 50km/h
	Driver	Passn	Driver
Head HIC	609	387	105
Acceleration (g for 3ms)	73.1	45.4	38.5
Neck - Shear (kN)	1.23	1.09	-
Tension (kN)	3.19	1.84	-
Extension (Nm)	40.51	16.13	-
Chest Accln (g for 3ms)	51.1	41.1	-
Compression (mm)	38.5	35.6	25.4
Viscous criterion (m/s)	0.3	0.2	0.17
Abdomen - Force (kN)	-	-	1.34
Pelvis - Force (kN)	-	-	2.94
Upper legs Force			
Left (kN)	3.2	0.3	
Right (kN)	7.3	2.4	
Knee displ (mm)			
Left	14.4	0.8	
Right	7.1	1.5	
Lower legs Force			
Left (kN)	2.1	1.6	
Right (kN)	0.9	1.1	
Index (Upper/Low)			
Left	0.36/0.52	0.33/0.26	
Right	0.4/0.87	0.23/0.12	

### Modifiers for offset test scores

Head	Steering col. movement	1 pt penalty
	Unstable airbag contact	1 pt penalty
Chest	A-pillar movement	1.18 pt penalty
	Loss of structure	1 pt penalty
Upper leg	Variable & conc. loading	Driver 2 pt penalty L, 1pt R; Pass. 2 pts R.
Lower legs	Brake pedal (up)	1 pt penalty
Foot score	Brake pedal (rear)	Zero score

### Pedestrian rating:

18.78 points out of 36 (52.2%)

Child head impacts 8.57 pts; adult head impacts 6 pts; upper leg impacts 0.72 pts; lower leg impacts 3.49 pts.



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