## **Crash Test Results**

**New Car Safety** 

## **NISSAN PATROL CAB/CHASSIS**

2008 on

**Dual front airbags** 



# Occupant Protection

### **Occupant Protection Score**

Variant: DX with leaf springs

Kerb mass: 2590 kg Vehicles built: 2010

#### 21.60 out of 37

Eng: 3.9 diesel Category: UTILITY

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

The tested model of Nissan Patrol cab/chassis was introduced in Australia during 2008. This rating only applies to models fitted with dual airbags.

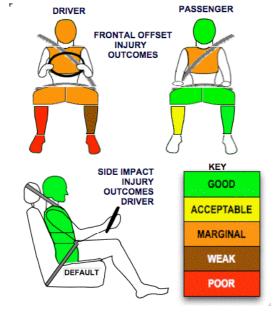
This model has minimal safety features. Dual front airbags became standard in 2009. A 2-point seat belt is fitted to the centre front seat. This provides inferior protection compared with a 3-point point (lap) seat belt. This seating position also lacks the protection of an airbag.

There are no top tether anchorages for child restraints so this vehicle is unsuitable for transporting children under the age of four.

#### **OCCUPANT PROTECTION: 3 Stars**

The Patrol cab/chassis scored 5.6 out of 16 in the offset crash test. The passenger compartment lost structural integrity. Protection from serious leg injury was poor for the driver. Chest protection was marginal for the driver and passenger. Driver head protection was also marginal.

The vehicle was awarded 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 2 pts, chest 1.6 pts, upper legs 2 pts, lower legs zero pts.

The passenger compartment lost structural integrity in the offset crash test. There was severe footwell deformation and rupture. The brake pedal moved rearwards by 331 mm and upwards 202 mm, to a position where it posed a hazard to the groin of the dummy. The steering wheel hub moved 128 mm rearward, 212 mm upward and 19 mm sideways. The front ("A") pillar moved 210 mm rearwards. All doors remained closed during the crash. After the crash tools were required to open both the driver door and passenger door. The tailshaft contacted the fuel tank shield but the tank was undamaged.

Driver contact with the airbag was not stable, partly due to excessive steering column and seat mount movement. Steering column components were a potential source of injury for the driver's knees. The passenger's head was cushioned by the airbag.

#### 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. 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: Poor

Only a few points were achieved in the adult head test area. The child head test area, bumper and bonnet leading edge scored no points.

PEDESTRIAN PROTECTION	Child head impacts	Zero
POOR	Adult head impacts	6.78
	Upper leg impacts	Zero
v5	Lower leg impacts	Zero
	Total (out of 36)	6.78



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## **TECHNICAL DATA - NISSAN PATROL CAB/C - 2007 on (dual airbags)**

#### **INJURY MEASUREMENTS**

Body region		Offset Crash Te (v4./	Side Impact Crash Test at 50km/h	
		Driver	Passenger	Driver
Head HIC		442	404	
Acceleration (g for 3ms)		55.6	46.1	
Neck - Shear (kN)		1.02	0.60	
Tension (kN)		2.29	1.56	
Extension (Nm)		43.7	16.1	5 ( )
Chest Accln (g for 3ms)		37.50	36.60	Default score awarded
Compression (mm)		24.80	38.50	
Viscous criterion (m/s)		0.08	0.16	
Abdomen - Force (kN)		1	=	
Pelvis - Force (kN)		-	-	
Upper legs Force (kN)	Left	0.70	0.38	
	Right	2.22	0.22	
Knee displ (mm)	Left	0.22	1.20	
	Right	5.60	2.50	
Lower legs Force (kN)	Left	3.00	1.76	
	Right	5.93	2.38	
Index (Upper/Low)	Left	0.54 /1.07	0.33 /0.27	
	Right	0.95 /3.17	0.51/0.21	

#### **Bonus points (maximum 5)**

Pole Test: Not eligible Seat belt reminders: None

#### Modifiers - deductions from offset test scores

Head Steer col displace. & unstable airbag contact 2pt deduction Chest Loss of structure and a-pillar displac. 2pt deduction

Upper leg Variable & conc. loading 2 pt deduction Left & Right

Lower leg Pedal upward displacement 1pt deduction Foot score Pedal rearward 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.

latest specifications.			
Driver airbag	S	Antilock (ABS) brakes / Electronic brake distribution / Brake Assist	X/X/X
Passenger front airbag	S	Electronic stability control (ESC, VSC, DSC, ESP, VSA)	X#
Side airbags, front seats - chest protection	Х	3 point centre rear seat belt	*
Side airbags, front seats - head protection	X	Whiplash rating	-
Side airbags, rear seats - head protection	-	Intelligent seat belt reminder - driver	X
Driver knee airbag	Х	Intelligent seat belt reminder - front passenger	Х
Seat belt pretensioners (Front/rear outboard)	X/-	Intelligent seat belt reminder - rear seats	_

Key: \* 2 point seat belt fitted to centre front seat

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 -= not applicable

# ESC required by ANCAP for 5 star rating from 2008



