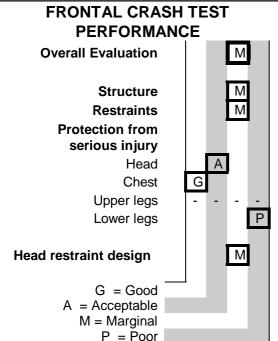
# New Car Safety Crash Tests 97-99 Nissan Patrol Drivers Airbag



## **OVERALL EVALUATION: MARGINAL**

Kerb weight: 2410 kg Vehicles built: June 1998

The lower part of the passenger compartment of the Patrol was severely deformed in the offset crash test. Protection from serious leg injury was poor. There was also substantial upward steering column movement which increased the risk of head and neck injury for the driver. In the full frontal crash test protection from serious head injury was acceptable for both the driver and passenger.

### **Safety features**

A driver's airbag is standard equipment on all models except the DX. A passenger airbag is standard on the Ti model but not available on other models.

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.

## STRUCTURE: MARGINAL

## Full frontal crash test

The passenger compartment held its shape well in the full frontal crash test. All doors remained closed during the crash and could be opened without tools after the crash.

## Offset crash test

The floor and firewall on the driver's side were severely deformed in the offset crash test. The chassis rail under the floor buckled sideways and this contributed to the floor and firewall separating from the side of the vehicle leaving a gap in excess of 30cm The front part of the driver's floor was pushed rearwards 48cm and the brake pedal ended up above and to the rear of the front edge of the driver's seat. The dash was pushed 7cm towards the driver. The width of the driver's doorway shortened by 7cm. All doors remained closed during the crash. After the crash all doors could be



opened except that tools were needed to manipulate the lock on the driver's door.

Offset crash test at 64km/h

# RESTRAINTS: MARGINAL

## Full frontal crash test

The driver's head was cushioned by the airbag and protection from serious head injury was acceptable. The passenger's head glanced the dash. The driver's knees hit the dash. The passenger's knees hit the glove box.

#### Offset crash test

The steering column moved up by a substantial 27cm. The driver's head was initially cushioned by the airbag but then the airbag moved up with the steering column. The driver's head ended up underneath the steering column. Both legs were forced up substantially by the intruding floor and protection from serious lower leg injury was poor. The upper legs of the dummy were also placed under high loads but, due to the manner in which the loads arose, it was not possible to determine the corresponding risk of upper leg injury to a human.

# **INJURY MEASUREMENTS**

Refer to the information sheet "How the evaluations are performed" for more details		Full Frontal Crash Test at 56km/h		Offset Crash Test at 64km/h	
		Driver	Passn	Driver	Passn
Head (HIC)		834	890	368	451
Chest (mm)		43	51	34	42
Chest (g)		56	53	37	41
Upper legs	L	1.2	4	0.8	.5
(kN)	R	1.5*	3.8	3	4.4
Lower leg	L	-	-	1.37	-
index	R	-	-	>3.0#	-
Injury Risk %		25%	25%	7%	9%
Overall Injury Risk				18%	20%

Injury risk is the probability of receiving a life-threatening injury. It is based on dummy head & chest measurements.

<sup>#</sup> Exceeded instrumentation limits



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<sup>\*</sup>Femur compression. reported. A high tension load was detected in the right femur but the instrument was not calibrated for this unusual type of loading.