# **Crash Tests**

# **New Car Safety**

# VW PASSAT(LHD)

2003 on

Front+side+head airbags

# **Overall Evaluation**



Overall score29.87 out of 37Variant: SEDANEng:1.9 litre.Kerb weight: 1530 kgCategory: LUXURYVehicles built: 2001Test by Euro NCAP

**Important note**: The *left-hand-drive* European model was tested by EuroNCAP. Australasian specifications may vary and therefore models sold in Australasia might provide different levels of protection to those described on this page.

# **Model History and Safety Features**

The tested model of VW PASSAT was introduced in Australia during 2001. This assessment applies to the 2003 Australian model.

Dual front airbags, side airbags and head-protecting side curtains are standard equipment in Australia. ABS brakes are also standard.

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 seat belt.

# **OVERALL EVALUATION: 4 Stars**

The VW PASSAT(LHD) scored 11.87 out of 16 in the offset crash test. The passenger compartment held its shape well. Protection from serious chest and leg injury was marginal for the driver

The vehicle scored 16 out of 16 in the side impact crash test. A further 2 points were scored in the optional pole test.

# FRONTAL OFFSET CRASH TEST

Body region scores out of 4 points each: Head/neck 4pts, chest 2.5pts, upper legs 2pts, lower legs 3.38pts.

The passenger compartment held its shape well in the offset crash test. The brake pedal moved rearwards by 74mm and upwards 4mm. The steering wheel hub moved rearwards 34mm, upwards 19mm and sideways 34mm. The front ("A") pillar moved 24mm rearwards. The width of the driver's doorway shortened by 24mm. 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. Dash 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 4pts, chest 4pts, abdomen 4pts, pelvis 4pts.

The vehicle was eligible for an optional pole impact test, since it had head-protecting side airbags and scored four points for the



Offset crash test at 64km/h

head in the side impact test. The manufacturer decided to go ahead with the pole test and the vehicle earned a further two 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		336	228	46.16
Acceleration (g for 3ms)		43.55	35.12	35.99
Neck - Shear (kN)		0.33	0.44	-
Tension (kN)		1.14	1.08	-
Extension (Nm)		8.65	15.35	-
Chest Accln (g for 3ms)				-
Compression (mm)		25.53	27.38	17.03
Viscous criterion (m/s)		0.11	0.22	0.12
Abdomen - Force (kN)		-	-	0.85
Pelvis - Force	(kN)	-	-	1.44
Upper legs Force	Left	1.37	0.84	
(kN)	Right	0.61	0.13	
Knee displ (mm)	Left	1.8	2.83	
	Right	1.16	0	
Lower legs Force Left		1.13	2.18	
(kN)	Right	2.61	2.25	
Index (Upper/Low) Left		0.22/0.29	0.46/0.51	
	Right	0.47/0.54	0.54/0.44	

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

Pole Test: 2pts Seat belt reminders: Not eligible

#### **Modifiers for offset test scores**

Head No deduction
Chest Steering wheel contact 1pt deduction
Upper leg Variable & conc. loading
Lower leg No deduction
Foot score Score 4 points

**Pedestrian rating** – tested to previous protocol.



# November 2003

Published by
New Car Assessment Program
PO Box 1555
Canberra ACT Australia 2601

PASSAT03.doc issued 11-Nov-03