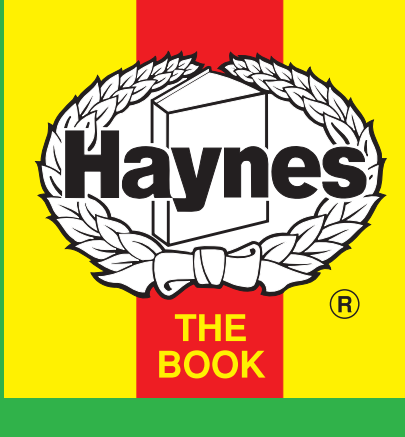




Automotive Technical

DATA BOOK

Click on one of the buttons above to view data for this car. To return to this screen and make another choice, click anywhere on the data screen.

MENU

HELP

Engine and cooling system

Passat/Santana 1.8 CAT

1984 to 1988

Type		JN. 66kW
Capacity (cm ³) / number of cylinders		1781 / 4
Compression ratio / pressure	bar	9.0 / ≥7.0
Oil pressure	bar	[2.0]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.20 to 0.30 ¹
Valve clearance - exhaust	mm	0.40 to 0.50 ¹
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	85
Radiator cap pressure	bar	1.2 to 1.5

Fuel system

Passat/Santana 1.8 CAT

1984 to 1988

Idle speed - manual [auto]	rpm	900±30
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	0.3 to 1.2
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO ₂ @ idle speed [3000 rpm] - see page VI	%	—
O ₂ @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Bosch
Type / ref		KE-Jetronic
Main jet / needle		—
Injection pressure	bar	3.5 to 4.1
Pump pressure	bar	5.2 to 5.6
Octane rating	RON	91[U]

Ignition system

Passat/Santana 1.8 CAT

1984 to 1988

Type		TCI-H
Ignition coil		Bosch
Primary resistance	ohms	0.52 to 0.76
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	—
Distributor		Bosch
Points gap (air gap)	mm	—
Dwell angle	° (%)	—
Condenser capacity	µF	—
Rotation		Clockwise
Ignition timing - basic [static	° Crankshaft @ rpm	6±1 BTDC @ 900±30
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 @ 1050 to 1300
	° Crankshaft @ rpm	15 to 19 @ 2600
	° Crankshaft @ rpm	22 to 26 @ 4500
Vacuum range check	mbar	120 to 260
Maximum vacuum advance	° Crankshaft	10 to 14
Spark plugs		Bosch/Champion
Type		W7DTC / N7BYC
Electrode gap	mm	0.70 to 0.90

Electrical system

Passat/Santana 1.8 CAT

1984 to 1988

Battery	V / CC / RC	12 / 175 / 60
Alternator voltage / full load current / engine rpm		—
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear

Passat/Santana 1.8 CAT

1984 to 1988

Brakes -		
Front (min. friction material thickness)	mm	7.0
Rear (min. friction material thickness)	mm	2.5

Tyres		
Saloon	Size	165x13: 185/70x13
Estate / Van	Size	165x13: 185/70x13
Pressure - front / rear - Saloon	bar	1.8 / 1.8
- Estate / Van	bar	1.8 / 1.8

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	[+10'±10']
Camber		-40'±30'
Castor		+30'[PAS 84 ►: +1°25']±30'
King pin inclination		—

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	[+25'±15']
Camber		-1°40'±20'

Torque wrench settings

Passat/Santana 1.8 CAT

1984 to 1988

Cylinder head - stage 1	Nm	40
- stage 2	Nm	60
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	+ 90°
Big-end bearings	Nm	30 + 90°
Main bearings	Nm	65 ²
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	30 + 90°
Front hubs	Nm	230
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	30

Capacities

Passat/Santana 1.8 CAT

1984 to 1988

Engine oil & filter	litres	3.0
Gearbox - 4-speed [5-speed]	litres	1.7 [2.0]
Automatic transmission - refill	litres	3.0
Final drive	litres	AT: 0.75
Cooling system	litres	7.0
Fuel tank	litres	68

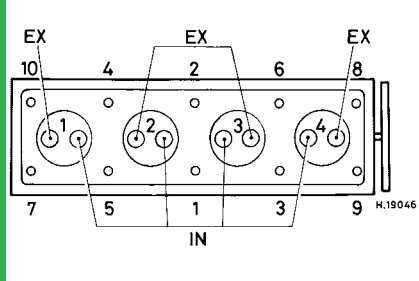
Notes and Illustrations

¹86 ►: 0: Hydraulic adjusters

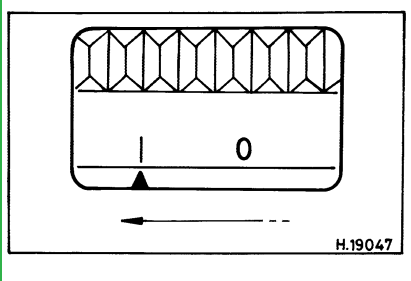
²Replace with fully threaded shank bolts: 65 + 90°

1: Idle speed

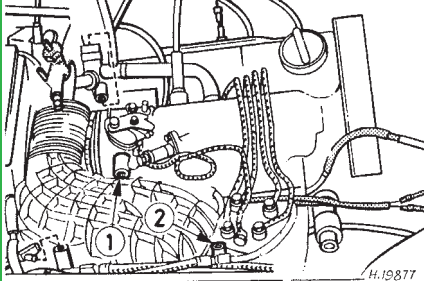
2: CO / Mixture



1781 cm³, 8V



1781 cm³, JN



KE-Jetronic, JN