

VOLKSWAGEN

Passat 1.8 & CAT

1988 to 1991

Engine & Cooling

Fuel

Ignition

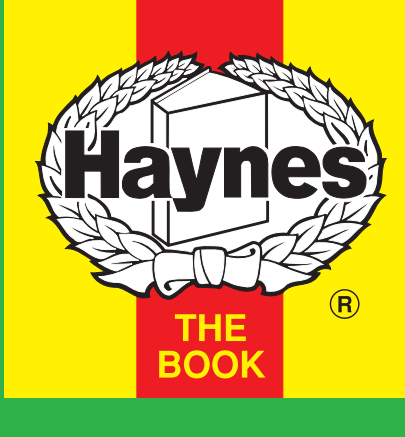
Electrical

Running gear

Torque settings

Capacities

Notes & Illustrations



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 1.8 & CAT

1988 to 1991

Type		RP. 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: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
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 1.8 & CAT

1988 to 1991

Idle speed - manual [auto]	rpm	750 to 1000 N/A
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	0.2 to 1.2 N/A
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Bosch
Type / ref		Mono-Jetronic
Main jet / needle		—
Injection pressure	bar	—
Pump pressure	bar	0.8 to 1.2
Octane rating	RON	91[E 91 RON] ¹

Ignition system

Passat 1.8 & CAT

1988 to 1991

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		—
Ignition timing - basic [static	° Crankshaft @ rpm	6±1 BTDC @ 750 to 1000
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 @ 950 to 1200
	° Crankshaft @ rpm	11 to 15 @ 2600
	° Crankshaft @ rpm	27 to 31 @ 6000
Vacuum range check	mbar	100 to 260
Maximum vacuum advance	° Crankshaft	10 to 14
Spark plugs		NGK
Type		BUR6ET
Electrode gap	mm	0.70 to 0.90

Electrical system

Passat 1.8 & CAT

1988 to 1991

Battery	V / CC / RC	12 / 220 / 75
Alternator voltage / full load current / engine rpm		12.5 to 14.5 / _ / 3000
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear

Passat 1.8 & CAT

1988 to 1991

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

Tyres		
Saloon	Size	185/65x14: 195/60x14:195/55x15
Estate / Van	Size	185/65x14: 195/60x14:205/50x15
Pressure - front / rear - Saloon	bar	2.1 / 2.1
- Estate / Van	bar	2.1 / 2.1

Front suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	[0±10']
Camber		-1°20'±20'
Castor		+1°40'±30' N/A
King pin inclination		—

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	[+25'±15'] ²
Camber		-1°40'±20 ³

Torque wrench settings

Passat 1.8 & CAT

1988 to 1991

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 ⁴
Clutch cover	Nm	20
Flywheel [driveplate]	Nm	60 + 90° N
Front hubs	Nm	265
Rear hubs	Nm	WSM
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	25

Capacities

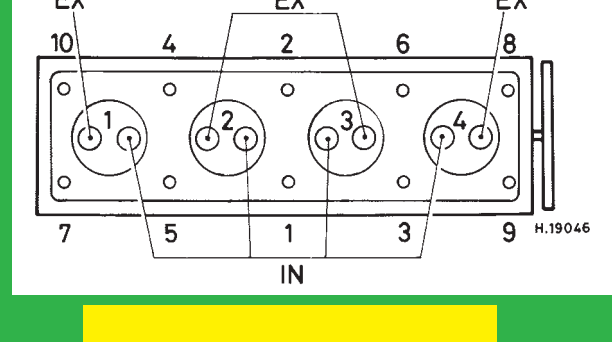
Passat 1.8 & CAT

1988 to 1991

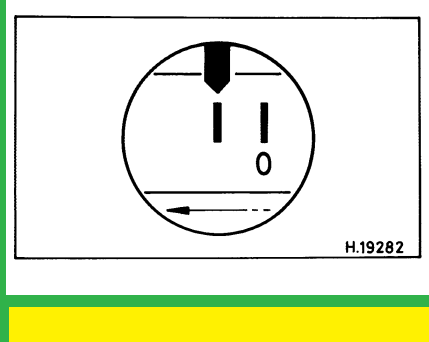
Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	2.0
Automatic transmission - refill	litres	3.0
Final drive	litres	AT: 0.75
Cooling system	litres	6.5
Fuel tank	litres	70

Notes and Illustrations

- ¹CAT: [U]
- ²Chassis no. 31LE222 111 or 31LB108 393 ►: [+20'±10']
- ³Chassis no. 31LE222 111 or 31LB108 393 ►: -1°30'±10'
- ⁴Replace with fully threaded shank bolts: 65+90°



1781 cm³, 8V



1781 cm³, RP