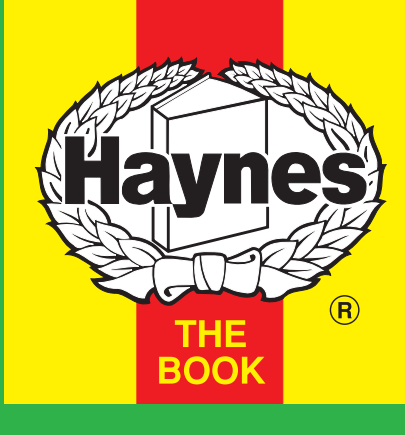




Automotive Technical

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 1.8i CAT

1988 to 1990

Type		PF. 79kW
Capacity (cm ³) / number of cylinders		1781 / 4
Compression ratio / pressure	bar	10.0 / ≥7.5
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 1.8i CAT

1988 to 1990

Idle speed - manual [auto]	rpm	800±50 temp sender plug on
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	0.7±0.4
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		Volkswagen
Type / ref		Digifant
Main jet / needle		—
Injection pressure	bar	2.5
Pump pressure	bar	3.0
Octane rating	RON	95[U] ¹

Ignition system

Passat 1.8i CAT

1988 to 1990

Type		Digifant
Ignition coil		Bosch
Primary resistance	ohms	Grey sticker: 0.6 to 0.8 ²
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 @ 2000 to 2500 ³
V = Vacuum NV = No Vacuum		
Total ignition advance	° Crankshaft @ rpm	30±3 BTDC @ 2300 ⁴
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	—
Spark plugs		Bosch/Champion
Type		W7DCO / N7YCX ⁵
Electrode gap	mm	0.70 to 0.80 ⁵

Electrical system

Passat 1.8i CAT

1988 to 1990

Battery	V / CC / RC	12 / 265 / 80
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 1.8i CAT

1988 to 1990

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

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'] ⁶
Camber		-1°40'±20' ⁷

Torque wrench settings

Passat 1.8i CAT

1988 to 1990

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 ⁸
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	20

Capacities

Passat 1.8i CAT

1988 to 1990

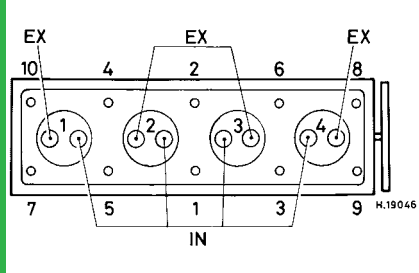
Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	2.0
Automatic transmission - refill	litres	3.0
Final drive	litres	AT: 0.75
Cooling system	litres	6.5
Fuel tank	litres	70

Notes and Illustrations

- ¹[E 91 RON], engine output reduced
- ²Coil with green sticker: 0.52 to 0.76
- ³80°C temperature sender plug disconnected
- ⁴80°C temperature sender plug connected
- ⁵Coil with green sticker: W7DTC / N7BYC, gap: 0.70 to 0.90
- ⁶Chassis no. 31LE222 111 or 31LB108 393 ►: [+20'±10']
- ⁷Chassis no. 31LE222 111 or 31LB108 393 ►: -1°30'±10'
- ⁸Replace with fully threaded shank bolts: 65+90°

1: Idle speed

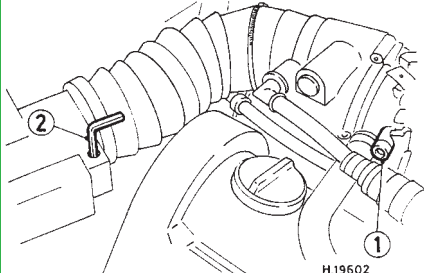
2: CO / Mixture



1781 cm³, 8V



1781 cm³, PF



Digifant, PF