

VOLKSWAGEN

Passat 1.6

1988 to 1993

Engine & Cooling

Fuel

Ignition

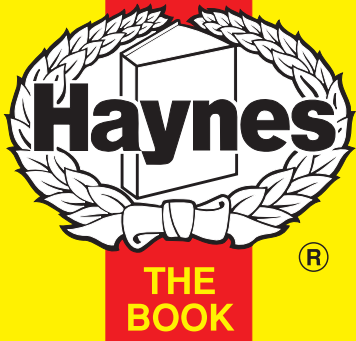
Electrical

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 1.6

1988 to 1993

Type	EZ. 6.91 ▶: ABN 55kW	
Capacity (cm <sup>3</sup> ) / number of cylinders	1595 / 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 to 105
Radiator cap pressure	bar	1.3 to 1.5

Fuel system

Passat 1.6

1988 to 1993

Idle speed - manual [auto]	rpm	800±50
Fast idle speed - manual [auto]	rpm	–
CO @ idle speed [3000 rpm] - see page VI	%	1.0±0.5
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	Solex/Pierburg	
Type / ref	2E3 037 129 016B/C	
Main jet / needle	107.5, 125	
Injection pressure	bar	–
Pump pressure	bar	–
Octane rating	RON	91[E 91 RON]

Ignition system

Passat 1.6

1988 to 1993

Type	TCI-H	
Ignition coil	Bosch	
Primary resistance	ohms	Green: 0.52 to 0.76. Grey 0.7
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	16±1 BTDC @ 800±50
V = Vacuum NV = No Vacuum	V	
Total ignition advance	° Crankshaft @ rpm	–
	° Crankshaft @ rpm	–
	° Crankshaft @ rpm	–
Centrifugal check.	° Crankshaft @ rpm	0 @ 1100 to 1300
	° Crankshaft @ rpm	10 to 14 @ 1800
	° Crankshaft @ rpm	28 to 32 @ 4000
Vacuum range check	mbar	150 to 360
Maximum vacuum advance	° Crankshaft	11 to 15
Spark plugs	Bosch/Champion	
Type	W8DCO / N9CYX <sup>1</sup>	
Electrode gap	mm	0.70 to 0.80 <sup>1</sup>

Electrical system

Passat 1.6

1988 to 1993

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 1.6

1988 to 1993

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'] <sup>2</sup>
Camber	-1°40'±20' <sup>3</sup>	

Torque wrench settings

Passat 1.6

1988 to 1993

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 <sup>4</sup>
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 1.6

1988 to 1993

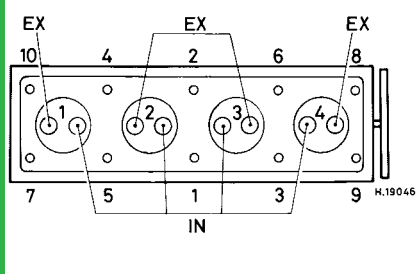
Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	2.0
Automatic transmission - refill	litres	–
Final drive	litres	WT
Cooling system	litres	6.5
Fuel tank	litres	70

Notes and Illustrations

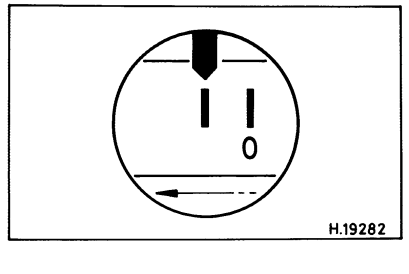
- <sup>1</sup>Coil with green sticker: W8DTC / N9BYC, gap: 0.90 to 1.10
- <sup>2</sup>Chassis no. 31LE222 111 or 31LB108 393 ▶: [+20'±10']
- <sup>3</sup>Chassis no. 31LE222 111 or 31LB108 393 ▶: -1°30'±10'
- <sup>4</sup>Replace with fully threaded shank bolts: 65+90°

1: Idle speed

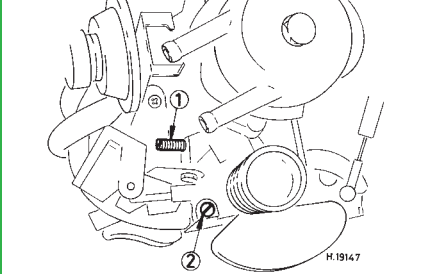
2: CO / Mixture



1595 cm<sup>3</sup>



1595 cm<sup>3</sup>



Solex / Pierburg 2E3