

VOLKSWAGEN

Transporter/Caravelle 1.9

1982 to 1992

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

Transporter/Caravelle 1.9

1982 to 1992

Type		DG. 57kW
Capacity (cm ³) / number of cylinders		1913 / 4
Compression ratio / pressure	bar	8.6 / 8.0
Oil pressure	bar	[2.0]
Oil temperature	°C	80
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-4-3-2
No 1 cylinder position		FER
Thermostat opening temperature	°C	85
Radiator cap pressure	bar	0.9 to 1.2

Fuel system

Transporter/Caravelle 1.9

1982 to 1992

Idle speed - manual [auto]	rpm	900±50 (2E4 N/A)
Fast idle speed - manual [auto]	rpm	2000±200 (2E4: 3600±200)
CO @ idle speed [3000 rpm] - see page VI	%	1.5±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
Type / ref		2E3 (87 ►: 2E4) 025 129 015
Main jet / needle		102.5, 110 ¹
Injection pressure	bar	—
Pump pressure	bar	0.20 to 0.30
Octane rating	RON	91[E 91 RON]

Ignition system

Transporter/Caravelle 1.9

1982 to 1992

Type		Electronic - Hall effect
Ignition coil		Bosch
Primary resistance	ohms	0.52 to 0.76 (88: 0.6 to 0.8)
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	5±1 BTDC @ ≤950
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	0 @ 1500 to 1700 ²
	° Crankshaft @ rpm	10 to 14 @ 2400 ²
	° Crankshaft @ rpm	24 to 28 @ 4200
Vacuum range check	mbar	150 to 315 ³
Maximum vacuum advance	° Crankshaft	12 to 16
Spark plugs		Bosch/Champion
Type		W7DTC / N7BYC ⁴
Electrode gap	mm	0.70 to 0.90 ⁴

Electrical system

Transporter/Caravelle 1.9

1982 to 1992

Battery	V / CC / RC	12 / 45, 54 or 63Ah
Alternator voltage / full load current / engine rpm		—
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear

Transporter/Caravelle 1.9

1982 to 1992

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.5

Tyres		
Saloon	Size	—
Estate / Van	Size	185x14
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	3.0 / 3.7 ⁵

Front suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	+2.0±3.5 ⁶
Camber		0±30'. 4x4: +20'±20'
Castor		+7°15'±15'. 4x4: +4°40'±15'
King pin inclination		—

Rear suspension / wheel alignment

Toe-in (+) / Toe-out (–)	mm [°]	[0±20'. 4x4: +10'±20']
Camber		-30'±30'. 4x4: -15'+30'-10'

Torque wrench settings

Transporter/Caravelle 1.9

1982 to 1992

Cylinder head - stage 1	Nm	10
- stage 2	Nm	50
Cylinder head - stage 3	Nm	—
- stage 4	Nm	—
Big-end bearings	Nm	45 ⁷
Main bearings	Nm	WSM
Clutch cover	Nm	20
Flywheel [driveplate]	Nm	30 + 90°
Front hubs	Nm	WSM ⁸
Rear hubs	Nm	500
Wheel nuts / bolts	Nm	180
Spark plugs	Nm	20

Capacities

Transporter/Caravelle 1.9

1982 to 1992

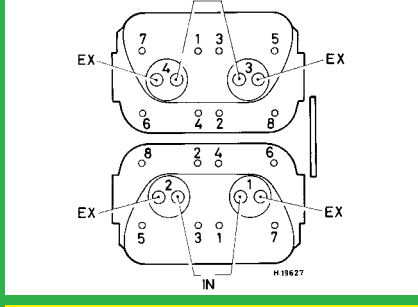
Engine oil & filter	litres	4.5
Gearbox - 4-speed [5-speed]	litres	3.0
Automatic transmission - refill	litres	3.0
Final drive	litres	AT: 1.3 ⁹
Cooling system	litres	17.5
Fuel tank	litres	60. 4x4: 70

Notes and Illustrations

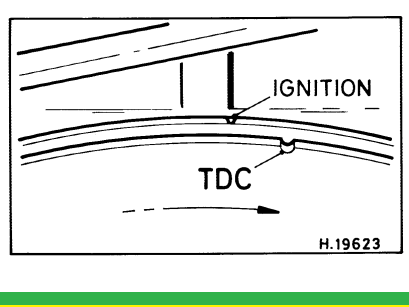
¹ 4x4: 100, 112.5. 85 ►: 102.5, 110
² 86 ►: 0 @ 1050 to 1160, 13 to 17 @ 2400
³ 86 ►: 150 to 330
⁴ 88 ►: W7DCO / N7YCX, gap: 0.70 to 0.80
⁵ 4x4: 3.0 / 3.3
⁶ 4x4: WSM
⁷ 86 ►: Stretch bolts: 30 + 180°. N
⁸ 4x4: 350
⁹ 4x4, front: 1.5, rear: WT

1: Idle speed

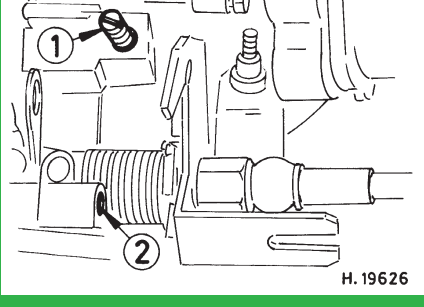
2: CO / Mixture



1913 cm³



1913 cm³



Solex 2E3 / 2E4