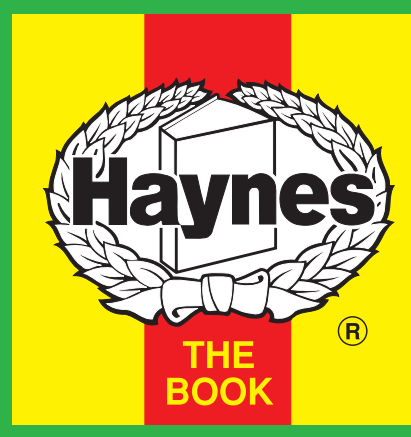


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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# Automotive Technical DATA BOOK

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 2.0/CAT      1991 to 1997

Type		AAC. 64kW, CAT: 62kW
Capacity (cm <sup>3</sup> ) / number of cylinders		1968 / 4
Compression ratio / pressure	bar	8.5 / ≥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	87
Radiator cap pressure	bar	1.3 to 1.5

### Fuel system      Transporter/Caravelle 2.0/CAT      1991 to 1997

Idle speed - manual [auto]	rpm	775 to 825 N/A
Fast idle speed - manual [auto]	rpm	2500 to 2800
CO @ idle speed [3000 rpm] - see page VI	%	≤0.5 [≤0.3] Ex
HC @ idle speed [3000 rpm] - see page VI	ppm	≤200
CO <sub>2</sub> @ idle speed [3000 rpm] - see page VI	%	-
O <sub>2</sub> @ 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	91[E 91 RON] <sup>1</sup>

### Ignition system      Transporter/Caravelle 2.0/CAT      1991 to 1997

Type		Digifant
Ignition coil		N152
Primary resistance	ohms	0.5 to 0.7
Ballast resistor	ohms	-
Voltage - Tmnl 15(+) to earth	V	-
Distributor		-
Points gap (air gap)	mm	-
Dwell angle	° (%)	-
Condenser capacity	µF	-
Rotation		-
Ignition timing - basic [static	° Crankshaft @ rpm	6±1 BTDC @ 2000 to 2500 N/A
V = Vacuum    NV = No Vacuum		-
Total ignition advance	° Crankshaft @ rpm	Computer control
	° 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		NGK/Champion
Type		BUR5ET / N9BMC
Electrode gap	mm	0.70 to 0.90 / ≤0.60

### Electrical system      Transporter/Caravelle 2.0/CAT      1991 to 1997

Battery	V / CC / RC	12 / 220 / 44Ah
Alternator voltage / full load current / engine rpm		- / 65 / 3000
Starter motor current / voltage - cranking	A / V	-
- locked	A / V	-

### Running gear      Transporter/Caravelle 2.0/CAT      1991 to 1997

<b>Brakes -</b>		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	1.0

<b>Tyres</b>		
Saloon	Size	-
Estate / Van	Size	185x14: 195/70x15: 205/65x15
Pressure - front / rear - Saloon	bar	-
- Estate / Van	bar	3.3 / 3.8 <sup>2</sup>

### Front suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	Group 1 & 2: [+20'±20'] <sup>3</sup>
Camber		Group 1 & 2: +15'±20" <sup>4</sup>
Caster		+1°40'±30'. Group 4: 1°50'±30'
King pin inclination		-

### Rear suspension / wheel alignment

Toe-in (+) / Toe-out (-)	mm [°]	Group 1 & 3: [+20'±20'] <sup>5</sup>
Camber		Group 1 & 3: -30'±30" <sup>6</sup>

### Torque wrench settings      Transporter/Caravelle 2.0/CAT      1991 to 1997

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>7</sup>
Clutch cover	Nm	20
Flywheel [driveplate]	Nm	60 + 90° N
Front hubs	Nm	150 + 90° N
Rear hubs	Nm	200
Wheel nuts / bolts	Nm	160
Spark plugs	Nm	30

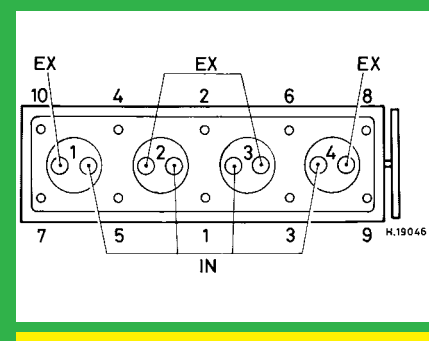
### Capacities      Transporter/Caravelle 2.0/CAT      1991 to 1997

Engine oil & filter	litres	5.0
Gearbox - 4-speed [5-speed]	litres	2.5
Automatic transmission - refill	litres	3.0
Final drive	litres	WT. AT: 1.15
Cooling system	litres	9.0
Fuel tank	litres	80

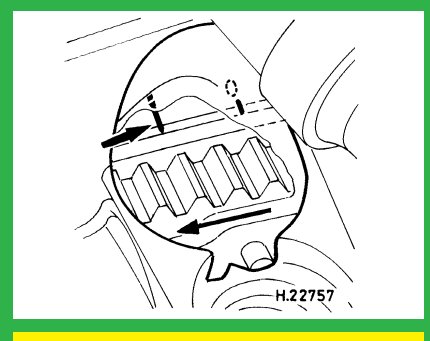
### Notes and Illustrations

- <sup>1</sup>CAT: [U]
- <sup>2</sup>195/70x15, 205/65x15: 2.6 / 3.4
- <sup>3</sup>Group 3: [+10'±20']. Group 4: [0±20']
- <sup>4</sup>Group 3: 0±20'. Group 4: -10'±20'
- <sup>5</sup>Group 2: +6'±20'. Group 4: +24'±20'
- <sup>6</sup>Group 2: 0±30'. Group 4: -40'±30'
- <sup>7</sup>Replace with fully threaded shank bolts: 65 + 90°

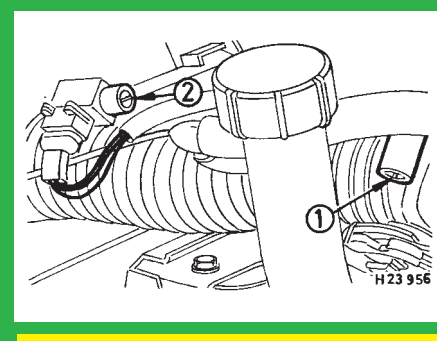
1: Idle speed      2: CO / Mixture



1968 cm<sup>3</sup>



1968 cm<sup>3</sup>



Digifant, AAC