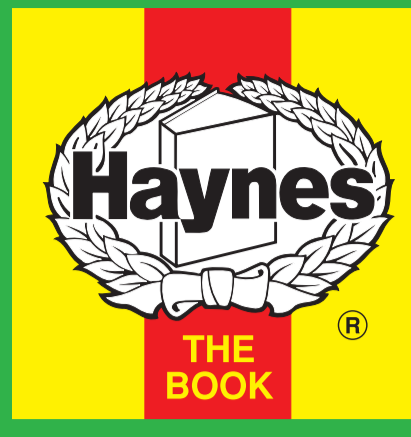


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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Automotive Technical DATA BOOK

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 2.8 1996 to 1997

Type	AES VR6 103kW EGR	
Capacity (cm ³) / number of cylinders	2792 / 6	
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	1-5-3-6-2-4	
No 1 cylinder position	TCE	
Thermostat opening temperature	°C	80
Radiator cap pressure	bar	1.2 to 1.5

Fuel system Transporter/Caravelle 2.8 1996 to 1997

Idle speed - manual [auto]	rpm	650 to 750 N/A
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	0.4 to 0.8 N/A
HC @ idle speed [3000 rpm] - see page VI	ppm	≤120
CO ₂ @ idle speed [3000 rpm] - see page VI	%	—
O ₂ @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection	Bosch	
Type / ref	Motronic	
Main jet / needle	—	
Injection pressure	bar	—
Pump pressure	bar	3.0
Octane rating	RON	95[U]

Ignition system Transporter/Caravelle 2.8 1996 to 1997

Type	Motronic	
Ignition coil	—	
Primary resistance	ohms	—
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	—
V = Vacuum NV = No Vacuum	—	
Total ignition advance	° Crankshaft @ rpm	Computer control
Centrifugal check.	° Crankshaft @ rpm	—
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	—
Spark plugs	NGK	
Type	BKR5EKUR	
Electrode gap	mm	0.7

Electrical system Transporter/Caravelle 2.8 1996 to 1997

Battery	V / CC / RC	12 / 220 / 45Ah
Alternator voltage / full load current / engine rpm	—	
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear Transporter/Caravelle 2.8 1996 to 1997

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	1.0
Tyres		
Saloon	Size	—
Estate / Van	Size	185x14:195/70x15:205/65x15
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	3.2:2.6:2.6 / 3.0:3.4:2.6
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	Group 1 & 2: [+20'±20']
Camber	Group 1 & 2: +15'±20'	
Castor	+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']
Camber	Group 1 & 3: -30'±30'	

Torque wrench settings Transporter/Caravelle 2.8 1996 to 1997

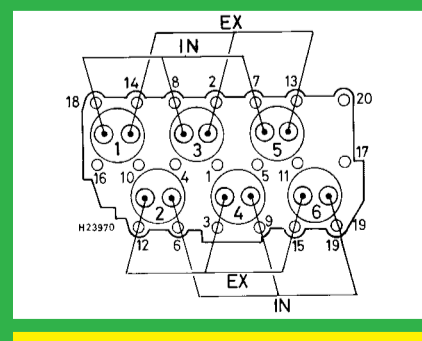
Cylinder head - stage 1	Nm	40 N
- stage 2	Nm	60
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	+ 90°
Big-end bearings	Nm	30 + 90° N
Main bearings	Nm	30 + 180° N
Clutch cover	Nm	20
Flywheel [driveplate]	Nm	60 + 90° N
Front hubs	Nm	150 + 90°
Rear hubs	Nm	150 + 90° N
Wheel nuts / bolts	Nm	160
Spark plugs	Nm	25

Capacities Transporter/Caravelle 2.8 1996 to 1997

Engine oil & filter	litres	5.5
Gearbox - 4-speed [5-speed]	litres	3.0 02B: 2.5
Automatic transmission - refill	litres	3.5
Final drive	litres	WT. AT: 1.15
Cooling system	litres	9.0
Fuel tank	litres	80

Notes and Illustrations

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2792 cm³