

Engine & Cooling

Fuel

Ignition

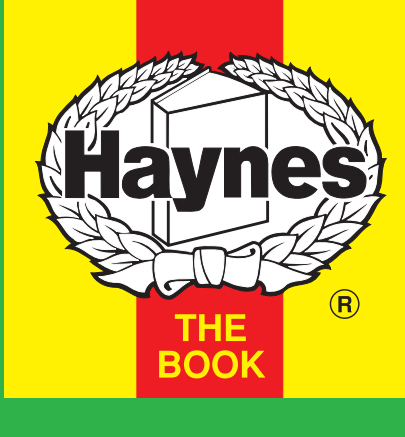
Electrical

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Automotive Technical
DATA BOOK

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Engine and cooling system

E280 CAT (124.028/088)

1992 to 1996

Type		104.942 DOHC 24V 147kW
Capacity (cm ³) / number of cylinders		2799 / 6
Compression ratio / pressure	bar	10.0 / ≥12.0
Oil pressure	bar	0.3 [3.0]
Oil temperature	°C	90
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-5-3-6-2-4
No 1 cylinder position		F
Thermostat opening temperature	°C	87±2
Radiator cap pressure	bar	1.40±0.10

Fuel system

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1992 to 1996

Idle speed - manual [auto]	rpm	650 to 750
Fast idle speed - manual [auto]	rpm	—
CO @ idle speed [3000 rpm] - see page VI	%	≤0.3
HC @ idle speed [3000 rpm] - see page VI	ppm	≤200
CO2 @ idle speed [3000 rpm] - see page VI	%	—
O2 @ idle speed [3000 rpm] - see page VI	%	—
Carburettor / fuel injection		Bosch
Type / ref		HFM MPFI
Main jet / needle		—
Injection pressure	bar	—
Pump pressure	bar	6.2 to 6.4
Octane rating	RON	95[U]

Ignition system

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1992 to 1996

Type		Computerized
Ignition coil		Bosch
Primary resistance	ohms	0.3 to 0.6
Ballast resistor	ohms	—
Voltage - Tmnl 15(+) to earth	V	Battery
Distributor		Bosch
Points gap (air gap)	mm	—
Dwell angle	° (%)	1 to 30 @ starter speed
Condenser capacity	µF	—
Rotation		—
Ignition timing - basic [static	° Crankshaft @ rpm	Computer control 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		Bosch
Type		F8DCO
Electrode gap	mm	0.80

Electrical system

E280 CAT (124.028/088)

1992 to 1996

Battery	V / CC / RC	12 / 190 / 62Ah
Alternator voltage / full load current / engine rpm		14.0 / 80, 90 / 2490
Starter motor current / voltage - cranking	A / V	95 / 11.5 (no load)
- locked	A / V	650 to 840 / 3.8

Running gear

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1992 to 1996

Brakes -		
Front (min. friction material thickness)	mm	3.5
Rear (min. friction material thickness)	mm	2.5

Tyres		
Saloon	Size	195/65x15
Estate / Van	Size	195/65x15
Pressure - front / rear - Saloon	bar	2.3 / 2.3
- Estate / Van	bar	2.0 / 2.5

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	[+20'±10']
Camber		-25'+10'-20'
Castor		+10°25'±30'
King pin inclination		—

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	[+20' to 35']
Camber		-1°30'±30'

Torque wrench settings

E280 CAT (124.028/088)

1992 to 1996

Cylinder head - stage 1	Nm	55. Bolt length ≤167.2mm
- stage 2	Nm	+ 90°
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	—
Big-end bearings	Nm	30 + 90 to 100°
Main bearings	Nm	55 + 90 to 100°
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	30 + 90 to 100°
Front hubs	Nm	WSM
Rear hubs	Nm	200 to 240
Wheel nuts / bolts	Nm	110
Spark plugs	Nm	30

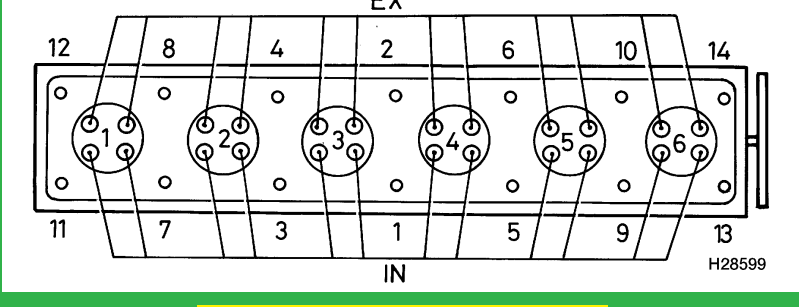
Capacities

E280 CAT (124.028/088)

1992 to 1996

Engine oil & filter	litres	7.5
Gearbox - 4-speed [5-speed]	litres	1.5
Automatic transmission - refill	litres	6.0
Final drive	litres	1.3
Cooling system	litres	9.0
Fuel tank	litres	70. Estate: 72

Notes and Illustrations



2799 cm³, 24V