

Engine & Cooling

Fuel

Ignition

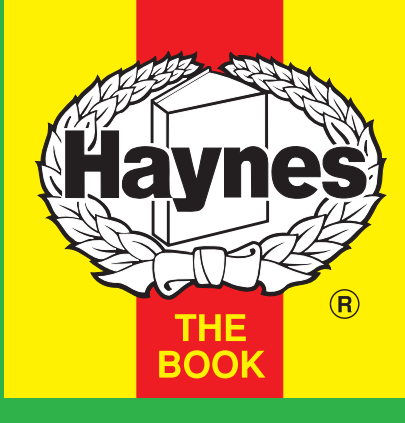
Electrical

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.

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HELP

Engine and cooling system

230 GE

1983 to 1991

Type		102.980
Capacity (cm³) / number of cylinders		2299 / 4
Compression ratio / pressure	bar	9.1 / ≥8.5
Oil pressure	bar	0.3 [3.0]
Oil temperature	°C	80
Valve clearance - inlet	mm	0.15
Valve clearance - exhaust	mm	0.30
Firing order		1-3-4-2
No 1 cylinder position		F
Thermostat opening temperature	°C	87±2
Radiator cap pressure	bar	1.0

Fuel system

230 GE

1983 to 1991

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		Bosch
Type / ref		CIS-E (KE-Jetronic)
Main jet / needle		—
Injection pressure	bar	≥3.0
Pump pressure	bar	5.3 to 5.5
Octane rating	RON	98[RA]

Ignition system

230 GE

1983 to 1991

Type		Electronic
Ignition coil		Bosch
Primary resistance	ohms	0.5 to 0.9
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	15±3 BTDC @ idle
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	32 BTDC @ 4500 (NV)
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	—
Centrifugal check.	° Crankshaft @ rpm	12 to 18 @ 800
	° Crankshaft @ rpm	—
	° Crankshaft @ rpm	26 to 30 @ 3000
Vacuum range check	mbar	—
Maximum vacuum advance	° Crankshaft	—
Spark plugs		Bosch/Champion
Type		H7D / S9YC
Electrode gap	mm	0.80

Electrical system

230 GE

1983 to 1991

Battery	V / CC / RC	12 / 66Ah
Alternator voltage / full load current / engine rpm		13.0 to 14.5 / _ / 3000
Starter motor current / voltage - cranking	A / V	—
- locked	A / V	—

Running gear

230 GE

1983 to 1991

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	3.5

Tyres		
Saloon	Size	—
Estate / Van	Size	205x16
Pressure - front / rear - Saloon	bar	—
- Estate / Van	bar	1.8 / 2.0

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	0±0.5
Camber		+1°±20’
Castor		+5°±20’
King pin inclination		+9°±20’

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [°]	—
Camber		—

Torque wrench settings

230 GE

1983 to 1991

Cylinder head - stage 1	Nm	55 ¹
- stage 2	Nm	+ 90°
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	—
Big-end bearings	Nm	30 + 90 to 100°
Main bearings	Nm	M12: 90. M11 ²
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	35 + 90 to 100°
Front hubs	Nm	WSM
Rear hubs	Nm	—
Wheel nuts / bolts	Nm	180
Spark plugs	Nm	20

Capacities

230 GE

1983 to 1991

Engine oil & filter	litres	4.5
Gearbox - 4-speed [5-speed]	litres	1.6 ³
Automatic transmission - refill	litres	—
Final drive	litres	1.6
Cooling system	litres	10.7
Fuel tank	litres	70

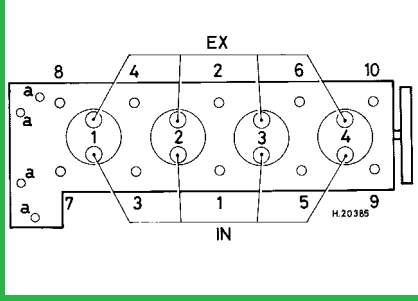
Notes and Illustrations

¹**Bolts marked “a” on diagram: 21**

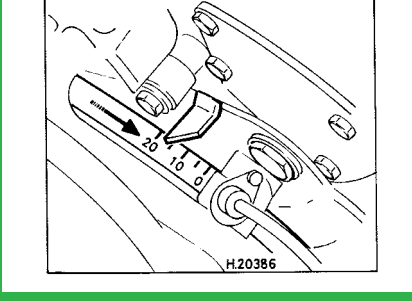
²**M11 bolts: 55 + 90 to 100°**

³**Transfer box: 2.0**

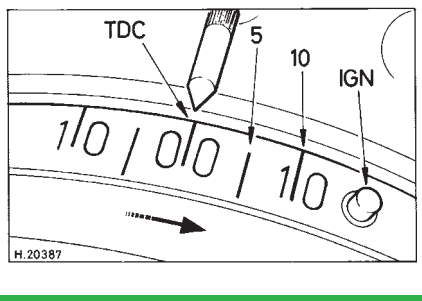
1: Idle speed 2: CO / Mixture



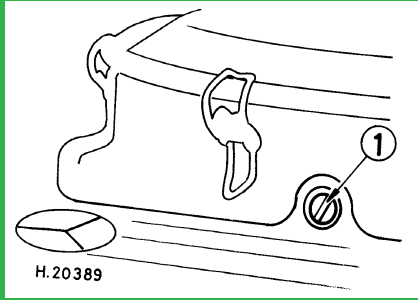
2299 cm³



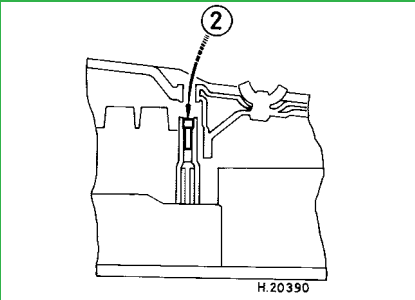
2299 cm³



2299 cm³, alternative



KE-Jetronic



KE-Jetronic