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

		850 Ci (E31) 1994 to 1996
Type		M70/B50 240kW
Capacity (cm³) / number of cylinders		5379 / 12
Compression ratio / pressure	bar	10.0 / ≥10.0
Oil pressure	bar	0.5 [4.0]
Oil temperature	ºC	80
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-7-5-11-3-9-6-12-2-8-4-10
No 1 cylinder position		PER
Thermostat opening temperature	ºC	80
Radiator cap pressure	bar	2.0±0.1

Fuel system

		850 Ci (E31) 1994 to 1996
Idle speed - manual [auto]	rpm	700±50
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	≤0.3 N/A
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		DME M5.2-Motronic
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	3.0±0.06
Octane rating	RON	95[U]

Ignition system

		850 Ci (E31) 1994 to 1996
Type		DME Motronic
Ignition coil		_
Primary resistance	ohms	a: 0.50. b: 0.37
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		_
Points gap (air gap)	mm	_
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	º Crankshaft @ rpm	Computer control N/A
V = Vacuum NV = No Vacuum		_
Total ignition advance	º Crankshaft @ rpm	Computer control
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	Computer control
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	º Crankshaft	_
Spark plugs		Bosch
Type		F8LCR
Electrode gap	mm	0.70 to 0.80

Electrical system

		850 Ci (E31) 1994 to 1996
Battery	V / CC / RC	12 / 130Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.2 / 140 / 3000
Starter motor current / voltage - cranking	A / V	_
- locked	A / V	_

Running gear

		850 Ci (E31) 1994 to 1996
Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.0
Tyres		
Saloon	Size	235/50x16
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.5 / 2.5
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+18'±5']
Camber		-11'±30'
Castor		+8°14'±30'
King pin inclination		_
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+18'±6']
Camber		-1°10'±15'

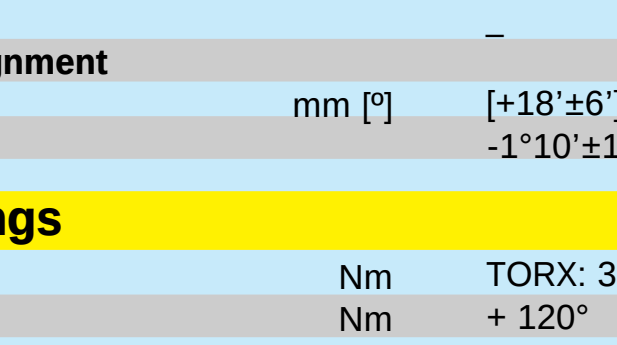
Torque wrench settings

		850 Ci (E31) 1994 to 1996
Cylinder head - stage 1	Nm	TORX: 30±2
- stage 2	Nm	+ 120°
Cylinder head - stage 3	Nm	_
- stage 4	Nm	_
Big-end bearings	Nm	23 + 70° N
Main bearings	Nm	20 + 70°
Clutch cover	Nm	_
Flywheel [driveplate]	Nm	105±5
Front hubs	Nm	290
Rear hubs	Nm	300
Wheel nuts / bolts	Nm	100±10
Spark plugs	Nm	30 to 33

Capacities

		850 Ci (E31) 1994 to 1996
Engine oil & filter	litres	8.0
Gearbox - 4-speed [5-speed]	litres	_
Automatic transmission - refill	litres	3.5
Final drive	litres	1.9
Cooling system	litres	13.0
Fuel tank	litres	90

Notes and Illustrations



5379 cm³, M70