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 — M5 (E34) 1992 to 1996

Type		S38/B38 38 6S1 250kW
Capacity (cm³) / number of cylinders		3795 / 6
Compression ratio / pressure	bar	10.5 / ≥10.0
Oil pressure	bar	1.0 to 1.5 [4.0 to 5.0]
Oil temperature	ºC	80
Valve clearance - inlet	mm	0.28 to 0.33
Valve clearance - exhaust	mm	0.28 to 0.33
Firing order		1-5-3-6-2-4
No 1 cylinder position		TCE
Thermostat opening temperature	ºC	79
Radiator cap pressure	bar	2.0±0.15

Fuel system — M5 (E34) 1992 to 1996

Idle speed - manual [auto]	rpm	850±50
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		DME-Motronic
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	_
Octane rating	RON	95[U]

Ignition system — M5 (E34) 1992 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	[0.30 to 0.70]
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		Clockwise
Ignition timing - basic [static	º Crankshaft @ rpm	Computer control
V = Vacuum NV = No Vacuum		NV
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		Y6DC
Electrode gap	mm	0.60+0.10

Electrical system — M5 (E34) 1992 to 1996

Battery	V / CC / RC	12 / 85Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.2 / 140 / 1500
Starter motor current / voltage - cranking	A / V	200 / 9.0
- locked	A / V	_

Running gear — M5 (E34) 1992 to 1996

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.0
Tyres		
Saloon	Size	235/45x17
Estate / Van	Size	235/45x17: 255/40x17
Pressure - front / rear - Saloon	bar	2.3 / 2.5
- Estate / Van	bar	Refer to car
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+20'±5'] L
Camber		-30'±30' L
Castor		+8°28'±30' L
King pin inclination		+12°46'±30' L
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+16'±4']
Camber		-2°15'±30'

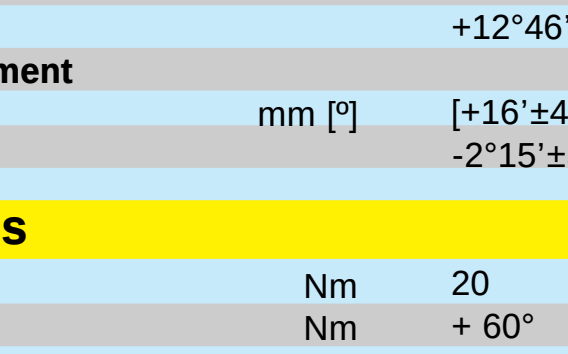
Torque wrench settings — M5 (E34) 1992 to 1996

Cylinder head - stage 1	Nm	20
- stage 2	Nm	+ 60°
Cylinder head - stage 3	Nm	+ 70°
- stage 4	Nm	_
Big-end bearings	Nm	15, 30 + 60° N
Main bearings	Nm	20 + 50° N
Clutch cover	Nm	24
Flywheel [driveplate]	Nm	105 N
Front hubs	Nm	WSM
Rear hubs	Nm	247.6 ±5%
Wheel nuts / bolts	Nm	100±10
Spark plugs	Nm	24 to 28

Capacities — M5 (E34) 1992 to 1996

Engine oil & filter	litres	5.75
Gearbox - 4-speed [5-speed]	litres	1.25
Automatic transmission - refill	litres	_
Final drive	litres	1.9
Cooling system	litres	13.3
Fuel tank	litres	90

Notes and Illustrations



3795 cm³, S38