Haynes THE BOOK ®

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 — 530i & Touring V8 (E34) — 1993 to 1996

Type		M60/B30 160kW DOHC 32V
Capacity (cm³) / number of cylinders		2997 / 8
Compression ratio / pressure	bar	10.5 / ≥10.0
Oil pressure	bar	≥0.5 [4.5]
Oil temperature	ºC	80
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-5-4-8-6-3-7-2
No 1 cylinder position		PER
Thermostat opening temperature	ºC	85
Radiator cap pressure	bar	2.0±0.15

Fuel system — 530i & Touring V8 (E34) — 1993 to 1996

Idle speed - manual [auto]	rpm	600±50
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	0.7±0.5 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		M3.3-Motronic
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	3.5±0.06
Octane rating	RON	95[U]

Ignition system — 530i & Touring V8 (E34) — 1993 to 1996

Type		Direct electronic
Ignition coil		Bosch
Primary resistance	ohms	0.8±0.1
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		_
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		NGK/Bosch
Type		BKR6EK / F7LDCR
Electrode gap	mm	0.70+0.10

Electrical system — 530i & Touring V8 (E34) — 1993 to 1996

Battery	V / CC / RC	12 / 75 or 85Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.2 / 100,140 / 1500
Starter motor current / voltage - cranking	A / V	160 / 9.0
- locked	A / V	_

Running gear — 530i & Touring V8 (E34) — 1993 to 1996

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.0
Tyres		
Saloon	Size	225/65x15: 240/45x15
Estate / Van	Size	225/60x15:240/45x15:225/55x16
Pressure - front / rear - Saloon	bar	2.0 / 2.3
- Estate / Van	bar	2.0 / 2.3. 225/55: 2.0 / 2.4
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+18'±5']
Camber		-13'±30'. Sport: -30'±30'
Castor		+8°8'±30'. Sport: +8°26'±30'
King pin inclination		+12°4'±30'. Sport: +12°38'±30'
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+25'±7']. Sport: [+28'±7'][1]
Camber		-2°20'±30'. Sport: -2°35'[2]

Torque wrench settings — 530i & Touring V8 (E34) — 1993 to 1996

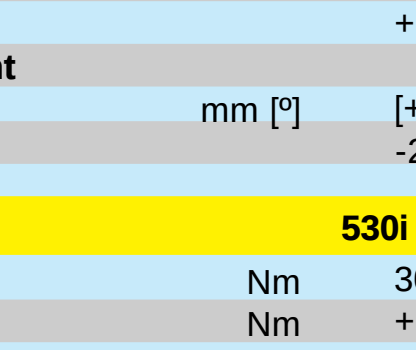
Cylinder head - stage 1	Nm	30±2 N
- stage 2	Nm	+ 80±5°
Cylinder head - stage 3	Nm	+ 80±5°
- stage 4	Nm	_
Big-end bearings	Nm	5, 20±1 + 80±5° N
Main bearings	Nm	20 + 70° N
Clutch cover	Nm	25
Flywheel [driveplate]	Nm	105±5 N
Front hubs	Nm	290
Rear hubs	Nm	247.6 ±5%
Wheel nuts / bolts	Nm	100±10
Spark plugs	Nm	30 to 33

Capacities — 530i & Touring V8 (E34) — 1993 to 1996

Engine oil & filter	litres	6.0 to 7.5
Gearbox - 4-speed [5-speed]	litres	1.25
Automatic transmission - refill	litres	3.3
Final drive	litres	1.7
Cooling system	litres	12.2. AT: 11.9
Fuel tank	litres	81

Notes and Illustrations

[1]**Touring Sport: [+29'±7']**
[2]**Touring Sport: -2°45'±30'**



2997 cm³, M60