Haynes THE BOOK ®

Automotive Technical DATA BOOK

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MENU HELP

Engine and cooling system

		535i & M535i (E28) 1985 to 1988
Type		M30 / B34
Capacity (cm³) / number of cylinders		3430 / 6
Compression ratio / pressure	bar	10.0 / 10 to 11
Oil pressure	bar	0.5 to 2.0
Oil temperature	ºC	_
Valve clearance - inlet	mm	0.35 H
Valve clearance - exhaust	mm	0.35 H
Firing order		1-5-3-6-2-4
No 1 cylinder position		TCE
Thermostat opening temperature	ºC	80
Radiator cap pressure	bar	1.0±0.1

Fuel system

		535i & M535i (E28) 1985 to 1988
Idle speed - manual [auto]	rpm	850±50
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	0.3 to 1.5
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		DME- Motronic
Main jet / needle		_
Injection pressure	bar	3.0
Pump pressure	bar	2.5 to 3.0
Octane rating	RON	98[R]

Ignition system

		535i & M535i (E28) 1985 to 1988
Type		DME Motronic
Ignition coil		Bosch 0 221 118 335
Primary resistance	ohms	0.5
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	≥10.8
Distributor		Bosch
Points gap (air gap)	mm	[0.30 to 0.70]
Dwell angle	º (%)	22 to 42 @ 3000±50 rpm
Condenser capacity	µF	_
Rotation		Clockwise
Ignition timing - basic [static	º Crankshaft @ rpm	-2 to +3 BTDC @ 850±50
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/Champion
Type		W8DC / N9YCX
Electrode gap	mm	0.70+0.10

Electrical system

		535i & M535i (E28) 1985 to 1988
Battery	V / CC / RC	12 / 66Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.2 / _ / 1500
Starter motor current / voltage - cranking	A / V	200 / 9.0
- locked	A / V	_

Running gear

		535i & M535i (E28) 1985 to 1988
Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.0
Tyres		
Saloon	Size	220/55x390
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.3 / 2.5
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+2.0±0.6
Camber		-20'±30'. M535i: -37'±30'
Castor		+8°±30' (10° lock)[1]
King pin inclination		+11°57'±30' (10° lock)[2]
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+2.0±0.8[3]
Camber		-2°20'±30'. M535i: -2°35'±30'

Torque wrench settings

		535i & M535i (E28) 1985 to 1988
Cylinder head - stage 1	Nm	60±2, wait 20 min.
- stage 2	Nm	80±2
Cylinder head - stage 3	Nm	Warm engine for 25 min.
- stage 4	Nm	+ 35±5°
Big-end bearings	Nm	52 to 57
Main bearings	Nm	58 to 63
Clutch cover	Nm	24
Flywheel [driveplate]	Nm	105±7 locked threads
Front hubs	Nm	WSM
Rear hubs	Nm	234 to 260
Wheel nuts / bolts	Nm	100±10
Spark plugs	Nm	26±2

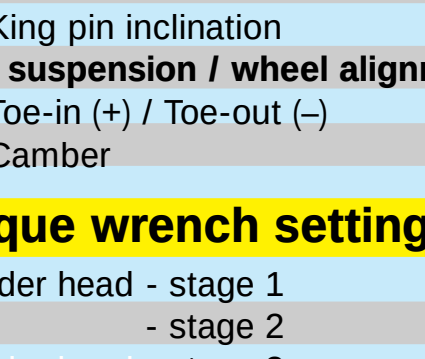
Capacities

		535i & M535i (E28) 1985 to 1988
Engine oil & filter	litres	5.8
Gearbox - 4-speed [5-speed]	litres	265: 1.6. 260: 1.3
Automatic transmission - refill	litres	3.0
Final drive	litres	1.9
Cooling system	litres	12.0
Fuel tank	litres	70

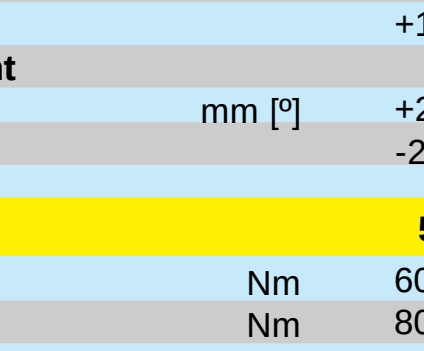
Notes and Illustrations

[1]**M535i: +8°20'±30'**
[2]**M535i: +12°38'±30'**
[3]**M535i: +3.2±0.8**

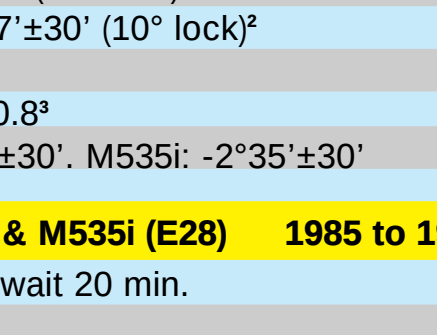
1: Idle speed 2: CO / Mixture



3430 cm³, M30



Motronic, 3430 cm³, E28



Motronic, 3430 cm³, E28