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

518i (E28) 1985 to 1988

Type		M10 / B18
Capacity (cm³) / number of cylinders		1766 / 4
Compression ratio / pressure	bar	9.5 / 10 to 11
Oil pressure	bar	0.5 to 2.0
Oil temperature	ºC	_
Valve clearance - inlet	mm	0.25 H
Valve clearance - exhaust	mm	0.25 H
Firing order		1-3-4-2
No 1 cylinder position		TCE
Thermostat opening temperature	ºC	80
Radiator cap pressure	bar	1.0±0.1

Fuel system

518i (E28) 1985 to 1988

Idle speed - manual [auto]	rpm	800±50
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	≤1.0
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		L-Jetronic
Main jet / needle		_
Injection pressure	bar	2.5. 9.83 ▶: 3.0
Pump pressure	bar	2.5 to 3.0
Octane rating	RON	98[R]

Ignition system

518i (E28) 1985 to 1988

Type		Electronic
Ignition coil		Bosch 0 221 122 319
Primary resistance	ohms	0.82
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	≥10.8
Distributor		Bosch
Points gap (air gap)	mm	_
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	º Crankshaft @ rpm	30 BTDC @ 3000±50
V = Vacuum NV = No Vacuum		NV
Total ignition advance	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	6 to 14 @ 1000
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	24 to 30 @ 5000
Vacuum range check	mbar	60 to 500
Maximum vacuum advance	º Crankshaft	18 to 22
Spark plugs		Bosch/Champion
Type		W8DC / N9YC
Electrode gap	mm	0.70+0.10

Electrical system

518i (E28) 1985 to 1988

Battery	V / CC / RC	12 / 44Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.2 / _ / 1500
Starter motor current / voltage - cranking	A / V	160 / 9.0
- locked	A / V	_

Running gear

518i (E28) 1985 to 1988

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	3.0
Tyres		
Saloon	Size	175x14
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.0 / 2.0
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+2.0±0.6
Camber		-20'±30'
Castor		+8°±30' (10° lock)
King pin inclination		+11°57'±30' (10° lock)
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	+2.0±0.8
Camber		WSM

Torque wrench settings

518i (E28) 1985 to 1988

Cylinder head - stage 1	Nm	60±2
- stage 2	Nm	+ 33±3°
Cylinder head - stage 3	Nm	Warm engine for 25 mins.
- stage 4	Nm	+ 25±5°
Big-end bearings	Nm	52 to 57
Main bearings	Nm	58 to 63
Clutch cover	Nm	22 to 24[1]
Flywheel [driveplate]	Nm	105±7 locked threads
Front hubs	Nm	WSM
Rear hubs	Nm	175 to 210
Wheel nuts / bolts	Nm	100±10
Spark plugs	Nm	26±2

Capacities

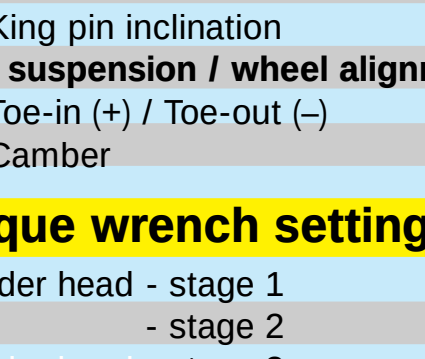
518i (E28) 1985 to 1988

Engine oil & filter	litres	4.0
Gearbox - 4-speed [5-speed]	litres	1.0[2]
Automatic transmission - refill	litres	3.0
Final drive	litres	1.7
Cooling system	litres	7.0
Fuel tank	litres	70

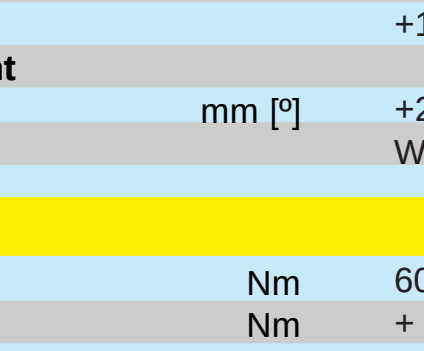
Notes and Illustrations

[1]**10.9 hex head bolt: 30 to 35**
[2]**245 type: 1.5**

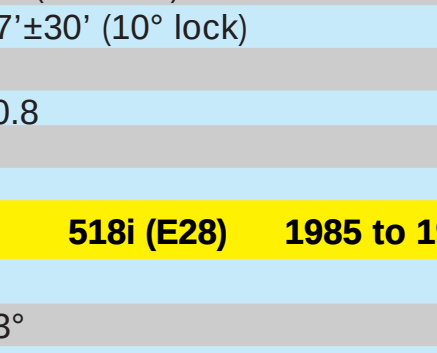
1: Idle speed 2: CO / Mixture



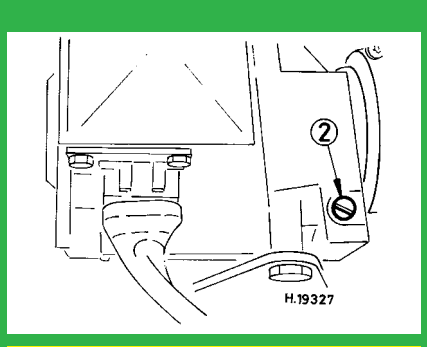
1766 cm³



1766 cm³



L-Jetronic, 1766 cm³



L-Jetronic