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 — Z1 — 1989 to 1991

Type		M20 / B25
Capacity (cm³) / number of cylinders		2494 / 6
Compression ratio / pressure	bar	8.8 / ≥10.0
Oil pressure	bar	0.5 [4.0]
Oil temperature	ºC	80
Valve clearance - inlet	mm	0.25
Valve clearance - exhaust	mm	0.25
Firing order		1-5-3-6-2-4
No 1 cylinder position		TBE
Thermostat opening temperature	ºC	80
Radiator cap pressure	bar	1.2±0.1

Fuel system — Z1 — 1989 to 1991

Idle speed - manual [auto]	rpm	760±40
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	0.7 ± 0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤120
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Bosch
Type / ref		M1.3-Motronic
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	3.0±0.06
Octane rating	RON	95[U]

Ignition system — Z1 — 1989 to 1991

Type		DME Motronic
Ignition coil		Bosch
Primary resistance	ohms	0.4 ± 0.1
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Bosch
Points gap (air gap)	mm	[0.30 to 0.70]
Dwell angle	º (%)	_
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	º Crankshaft @ rpm	10°±5° @ Idle
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/Champion
Type		W8LCR / N9YCC
Electrode gap	mm	0.70 to 0.80

Electrical system — Z1 — 1989 to 1991

Battery	V / CC / RC	12 / 66Ah
Alternator voltage / full load current / engine rpm		13.5 to 14.2 / _ / 3000
Starter motor current / voltage - cranking	A / V	_
- locked	A / V	_

Running gear — Z1 — 1989 to 1991

Brakes -		
Front (min. friction material thickness)	mm	2.0
Rear (min. friction material thickness)	mm	2.0
Tyres		
Saloon	Size	205/55x15: 225/45x16
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.2 / 2.2
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+15'±5']
Camber		-52'±30'
Castor		+10°23'±30' (20° lock)
King pin inclination		+14°4'±30' (20° lock)
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[+25'±6']
Camber		-1°55'±15'

Torque wrench settings — Z1 — 1989 to 1991

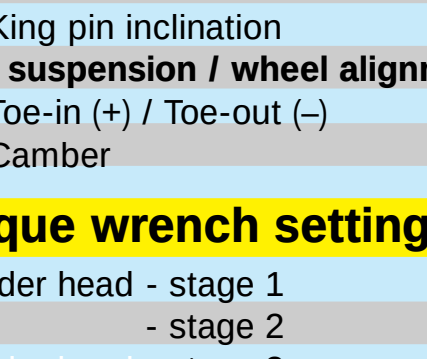
Cylinder head - stage 1	Nm	TORX: 30 to 32 WSM
- stage 2	Nm	+ 90±3°
Cylinder head - stage 3	Nm	+ 90±3°
- stage 4	Nm	_
Big-end bearings	Nm	23 + 70° N
Main bearings	Nm	58 to 63
Clutch cover	Nm	23
Flywheel [driveplate]	Nm	113 to 130 N
Front hubs	Nm	304
Rear hubs	Nm	200
Wheel nuts / bolts	Nm	100±10
Spark plugs	Nm	20 to 30

Capacities — Z1 — 1989 to 1991

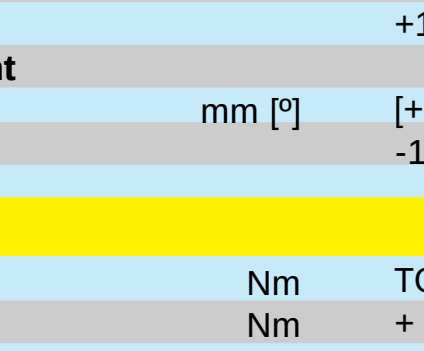
Engine oil & filter	litres	4.3
Gearbox - 4-speed [5-speed]	litres	1.3
Automatic transmission - refill	litres	3.0
Final drive	litres	1.9
Cooling system	litres	10.5
Fuel tank	litres	57

Notes and Illustrations

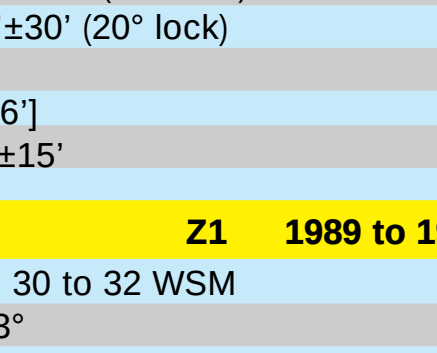
1: Idle speed 2: CO / Mixture



2494 cm³



M1.3-Motronic



M1.3-Motronic