

- Engine & Cooling
- Fuel
- Ignition
- Electrical
- Running gear
- Torque settings
- Capacities
- Notes & Illustrations



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 Tipo 1.6ie CAT 1990 to 1994

Type		159 A3.046 SOHC 57kW US83
Capacity (cm ³) / number of cylinders		1581 / 4
Compression ratio / pressure	bar	9.2+0.1-0.2 / _
Oil pressure	bar	[3.4 to 4.9]
Oil temperature	°C	100
Valve clearance - inlet	mm	0.40±0.05
Valve clearance - exhaust	mm	0.50±0.05
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	80 to 84
Radiator cap pressure	bar	0.98

Fuel system Tipo 1.6ie CAT 1990 to 1994

Idle speed - manual [auto]	rpm	800 to 850 N/A
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	0.4 to 1.0. Ex: ≤0.5 N/A
HC @ idle speed [3000 rpm] - see page VI	ppm	≤100 Ex
CO ₂ @ idle speed [3000 rpm] - see page VI	%	_
O ₂ @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection		Bosch ¹
Type / ref		Mono-Jetronic SPI
Main jet / needle		_
Injection pressure	bar	_
Pump pressure	bar	1.1±0.1
Octane rating	RON	95[U]

Ignition system Tipo 1.6ie CAT 1990 to 1994

Type		Digiplex 2-Static ¹
Ignition coil		Marelli BAE 504D
Primary resistance	ohms	0.405 to 0.495
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Marelli
Points gap (air gap)	mm	_
Dwell angle	° (%)	_
Condenser capacity	µF	_
Rotation		_
Ignition timing - basic [static	° Crankshaft @ rpm	4±2 BTDC @ 600 to 1000
V = Vacuum NV = No Vacuum		_
Total ignition advance	° Crankshaft @ rpm	44±2 BTDC @ ≤5000
	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
Centrifugal check.	° Crankshaft @ rpm	Computer control
	° Crankshaft @ rpm	_
	° Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	° Crankshaft	_
Spark plugs		Champion
Type		RN9YCC
Electrode gap	mm	0.85 to 0.95

Electrical system Tipo 1.6ie CAT 1990 to 1994

Battery	V / CC / RC	12 / 225 / 55Ah
Alternator voltage / full load current / engine rpm		14.0 to 14.6 / 65 / 3500
Starter motor current / voltage - cranking	A / V	200 / 9.8 to 10.0
- locked	A / V	440 / 7.6

Running gear Tipo 1.6ie CAT 1990 to 1994

Brakes -		
Front (min. friction material thickness)	mm	1.5
Rear (min. friction material thickness)	mm	1.5
Tyres		
Saloon	Size	165/70x13
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.0 / 2.0
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	0±1.0
Camber		+15'±30' N/A
Castor		+1°20'±30'. PAS: +2°20'±30'
King pin inclination		_
Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	-1.0±2.0
Camber		-1°±30'

Torque wrench settings Tipo 1.6ie CAT 1990 to 1994

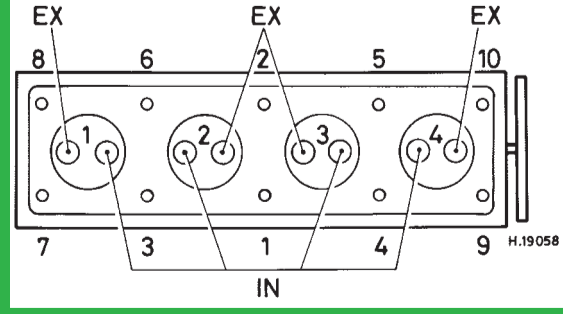
Cylinder head - stage 1	Nm	20
- stage 2	Nm	40
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	+ 90°
Big-end bearings	Nm	51
Main bearings	Nm	80
Clutch cover	Nm	M6: 17. M8: 30
Flywheel [driveplate]	Nm	83
Front hubs	Nm	235
Rear hubs	Nm	320
Wheel nuts / bolts	Nm	86
Spark plugs	Nm	25 to 30

Capacities Tipo 1.6ie CAT 1990 to 1994

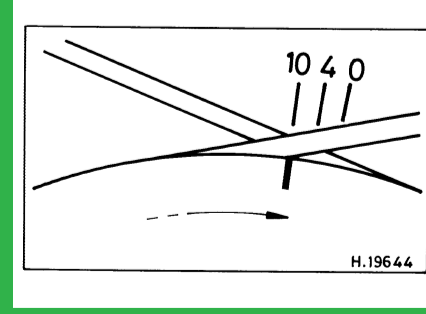
Engine oil & filter	litres	3.8
Gearbox - 4-speed [5-speed]	litres	1.4
Automatic transmission - refill	litres	3.5
Final drive	litres	WT
Cooling system	litres	8.0
Fuel tank	litres	55

Notes and Illustrations

¹93 ▶: Bosch MA1.7-Mono-Motronic



1581 cm³



1581 cm³