

MENU **HELP**

Engine and cooling system		Tipo 1.6ie CAT	1990 to 1994
Type		159 A3.046 SOHC 57kW US83	
Capacity (cm³) / 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'

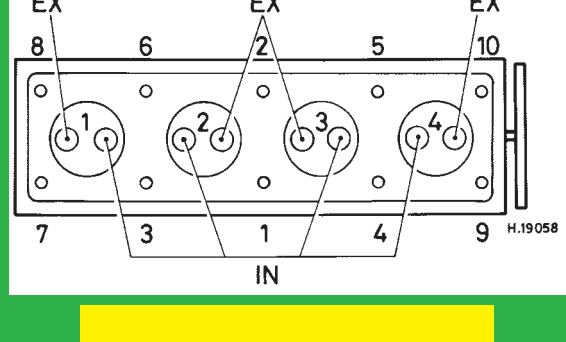
Cambridge University Press

Torque wrench settings		Typo 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	

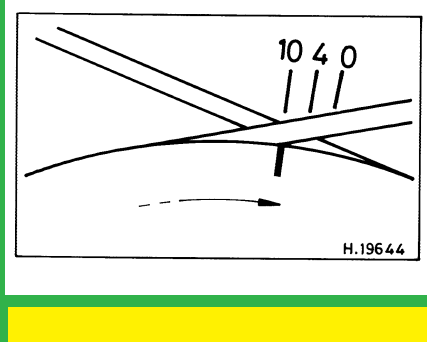
Capacities		Tipo 1.6ie CAT	1990 to 1994
Engine oil & filter	litres	3.8	
Gearbox - 4-speed [5-speed]	litres	1.4	
Automatic transmission - refill	litres	3.5	
Final drive	litres	WT	
Cooling system	litres	8.0	
Fuel tank	litres	55	

Notes and Illustrations

93 ►: Bosch MA1.7-Mono-Motronic



100% Off!



1001 0111