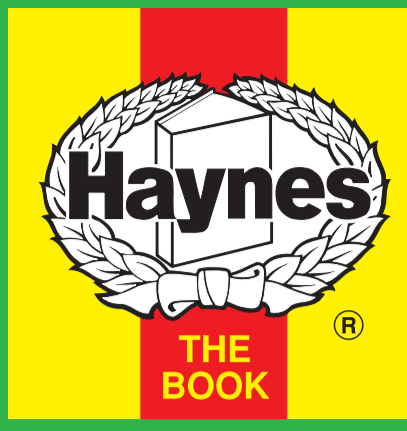


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
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# Automotive Technical DATA BOOK

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 1.8ie 1990 to 1992

Type	159 A4.000 DOHC 8V (80kW)	
Capacity (cm <sup>3</sup> ) / number of cylinders	1756 / 4	
Compression ratio / pressure	bar	9.5±0.15 / _
Oil pressure	bar	1.5 [4.6]
Oil temperature	°C	100
Valve clearance - inlet	mm	0.43±0.04
Valve clearance - exhaust	mm	0.48±0.04
Firing order	1-3-4-2	
No 1 cylinder position	TBE	
Thermostat opening temperature	°C	83±2
Radiator cap pressure	bar	0.98

## Fuel system Tipo 1.8ie 1990 to 1992

Idle speed - manual [auto]	rpm	820±50
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	1.5±0.5
HC @ idle speed [3000 rpm] - see page VI	ppm	≤1200
CO <sub>2</sub> @ idle speed [3000 rpm] - see page VI	%	_
O <sub>2</sub> @ idle speed [3000 rpm] - see page VI	%	_
Carburettor / fuel injection	Weber-Marelli	
Type / ref	IAW MPI	
Main jet / needle	_	
Injection pressure	bar	3.0±0.2
Pump pressure	bar	≤4.5
Octane rating	RON	97[E 95 RON]

## Ignition system Tipo 1.8ie 1990 to 1992

Type	IAW	
Ignition coil	Marelli BAE 504DK	
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 V = Vacuum NV = No Vacuum]	° Crankshaft @ rpm	15±2 BTDC @ 820±50
Total ignition advance	° Crankshaft @ rpm	_
	° 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	Bosch/Champion	
Type	WR6D / RN7YC	
Electrode gap	mm	0.70 to 0.80

## Electrical system Tipo 1.8ie 1990 to 1992

Battery	V / CC / RC	12 / 225 / 55, 60, 70Ah
Alternator voltage / full load current / engine rpm	14.0 to 14.6 / 65, 90 / 3500	
Starter motor current / voltage - cranking	A / V	360 to 380 / 8.15
- locked	A / V	680 to 700 / 4.9

## Running gear Tipo 1.8ie 1990 to 1992

<b>Brakes -</b>		
Front (min. friction material thickness)	mm	1.5
Rear (min. friction material thickness)	mm	1.5
<b>Tyres</b>		
Saloon	Size	175/65x14: 185/60x14
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.2 / 2.2
- Estate / Van	bar	_
<b>Front suspension / wheel alignment</b>		
Toe-in (+) / Toe-out (-)	mm [°]	-1.0 to +1.0
Camber	+25'±30' N/A	
Castor	+2°50'±30' N/A	
King pin inclination	_	
<b>Rear suspension / wheel alignment</b>		
Toe-in (+) / Toe-out (-)	mm [°]	-3.0 to +1.0
Camber	-1°±30' N/A	

## Torque wrench settings Tipo 1.8ie 1990 to 1992

Cylinder head - stage 1	Nm	20
- stage 2	Nm	40
Cylinder head - stage 3	Nm	+ 90°
- stage 4	Nm	+ 90°
Big-end bearings	Nm	25 + 50°
Main bearings	Nm	Centre: 20 + 130° <sup>1</sup>
Clutch cover	Nm	38
Flywheel [driveplate]	Nm	142
Front hubs	Nm	275
Rear hubs	Nm	320
Wheel nuts / bolts	Nm	86
Spark plugs	Nm	25 to 30

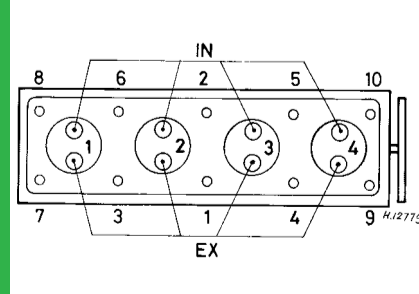
## Capacities Tipo 1.8ie 1990 to 1992

Engine oil & filter	litres	5.2
Gearbox - 4-speed [5-speed]	litres	2.0
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	6.9
Fuel tank	litres	55

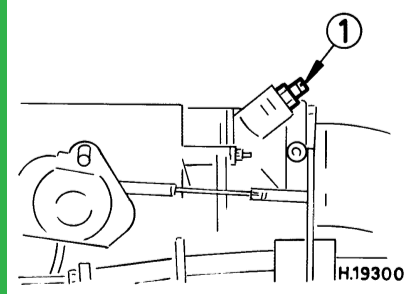
## Notes and Illustrations

<sup>1</sup>Side: 20 + 90°

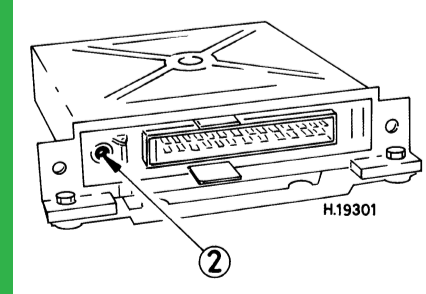
1: Idle speed    2: CO / Mixture



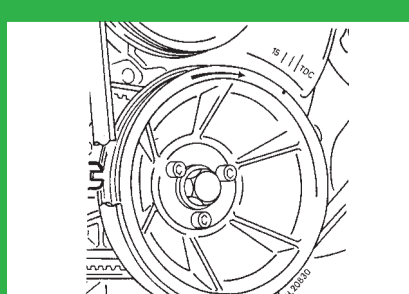
1756 cm<sup>3</sup>, 8V



Weber-Marelli IAW



Weber-Marelli IAW



1756 cm<sup>3</sup>