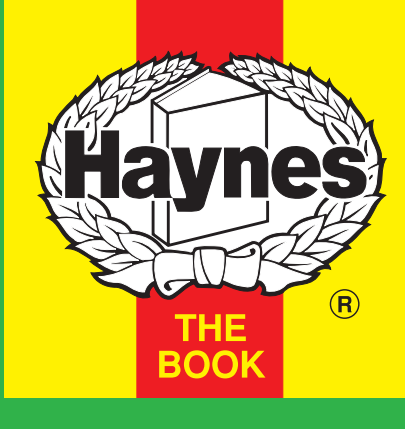


Engine & Cooling	Fuel	Ignition	Electrical	Running gear	Torque settings	Capacities	Notes & Illustrations
------------------	------	----------	------------	--------------	-----------------	------------	-----------------------



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 1.8ie 16V 1990 to 1991

Type		160 A5.000 DOHC 16V (100kW)
Capacity (cm³) / number of cylinders		1756 / 4
Compression ratio / pressure	bar	9.9±0.15 / _
Oil pressure	bar	[3.4 to 4.9]
Oil temperature	°C	100
Valve clearance - inlet	mm	0.32±0.03
Valve clearance - exhaust	mm	0.32±0.03
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 16V 1990 to 1991

Idle speed - manual [auto]	rpm	900±30
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
CO2 @ idle speed [3000 rpm] - see page VI	%	_
O2 @ 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 16V 1990 to 1991

Type		AEI
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	° Crankshaft @ rpm	10±3 BTDC @ 900±30
V = Vacuum NV = No Vacuum		_
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		WR6DTC / RN7YC
Electrode gap	mm	0.80 to 1.00

Electrical system

Tipo 1.8ie 16V 1990 to 1991

Battery	V / CC / RC	12 / 320 / 60 or 380 / 70Ah
Alternator voltage / full load current / engine rpm		14.3 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 16V 1990 to 1991

Brakes -		
Front (min. friction material thickness)	mm	1.5
Rear (min. friction material thickness)	mm	1.5

Tyres		
Saloon	Size	175/65x14: 185/60x14
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	2.2 / 2.2
- Estate / Van	bar	_

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	-1.0 to +1.0
Camber		+25'±30' N/A
Castor		+2°20'±30' N/A
King pin inclination		_

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	-3.0 to +1.0
Camber		-1°30'±30' N/A

Torque wrench settings

Tipo 1.8ie 16V 1990 to 1991

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°¹
Clutch cover	Nm	38
Flywheel [driveplate]	Nm	142
Front hubs	Nm	360
Rear hubs	Nm	320
Wheel nuts / bolts	Nm	86
Spark plugs	Nm	25 to 30

Capacities

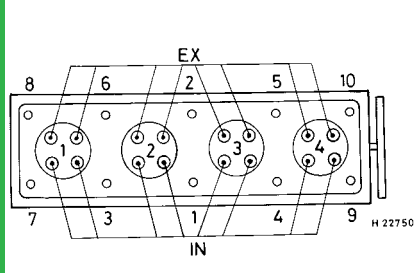
Tipo 1.8ie 16V 1990 to 1991

Engine oil & filter	litres	5.2
Gearbox - 4-speed [5-speed]	litres	1.4
Automatic transmission - refill	litres	_
Final drive	litres	WT
Cooling system	litres	8.0
Fuel tank	litres	55

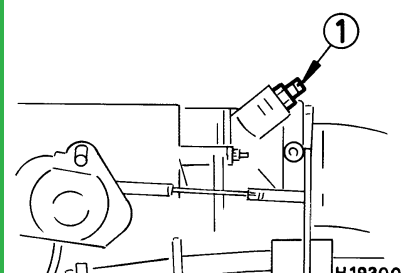
Notes and Illustrations

¹Side: 20 + 90°

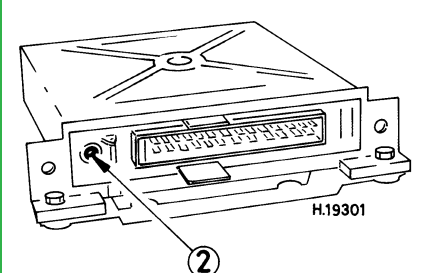
1: Idle speed 2: CO / Mixture



1756 cm³, 16V



Weber-Marelli IAW



Weber-Marelli IAW