

Engine & Cooling

Fuel

Ignition

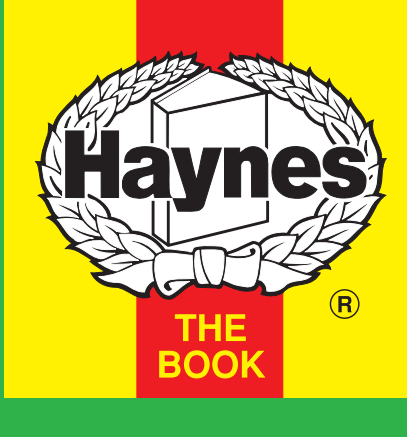
Electrical

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 system820 MPI1986 to 1991

Type		M16i, 20 HD DOHC 16V
Capacity (cm³) / number of cylinders		1994 / 4
Compression ratio / pressure	bar	10.0 / _
Oil pressure	bar	0.7 [3.8]
Oil temperature	°C	_
Valve clearance - inlet	mm	0: Hyd.
Valve clearance - exhaust	mm	0: Hyd.
Firing order		1-3-4-2
No 1 cylinder position		TBE
Thermostat opening temperature	°C	88
Radiator cap pressure	bar	1.04

Fuel system820 MPI1986 to 1991

Idle speed - manual [auto]	rpm	Base: 750±25 [700±25] ¹
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	1.0±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		Rover
Type / ref		MPI (H)
Main jet / needle		_
Injection pressure	bar	3.0 above manifold
Pump pressure	bar	4.1
Octane rating	RON	97[E 95 RON]

Ignition system820 MPI1986 to 1991

Type		Computerized
Ignition coil		GCL 141
Primary resistance	ohms	0.71 to 0.81
Ballast resistor	ohms	_
Voltage - Tmnl 15(+) to earth	V	_
Distributor		Lucas
Points gap (air gap)	mm	_
Dwell angle	° (%)	_
Condenser capacity	µF	_
Rotation		Anticlockwise
Ignition timing - basic [static	° Crankshaft @ rpm	12 BTDC @ 1500
V = Vacuum NV = No Vacuum		NV
Total ignition advance	° Crankshaft @ rpm	22 to 28 BTDC @ 1500
	° 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		Unipart/Champion
Type		GSP4662 / RC9YC
Electrode gap	mm	1.0 ²

Electrical system820 MPI1986 to 1991

Battery	V / CC / RC	12 / 480 / 90
Alternator voltage / full load current / engine rpm		14.0 / _ / 3000
Starter motor current / voltage - cranking	A / V	_
- locked	A / V	_

Running gear820 MPI1986 to 1991

Brakes -		
Front (min. friction material thickness)	mm	8.2 with backing plate
Rear (min. friction material thickness)	mm	7.2 with backing plate

Tyres		
Saloon	Size	175x14: 195/70x14: 195/65x15 ³
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	1.7 / 1.7 ⁴
- Estate / Van	bar	_

Front suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	[0±8']. 91 ►: [0±15']
Camber		+11'±30'. 88 ►: +24'±1°12'
Castor		+1°54'±15'. 88 ►: +2°36'±2°
King pin inclination		+8°±1°12'

Rear suspension / wheel alignment		
Toe-in (+) / Toe-out (-)	mm [°]	[+10'±4']. 88 ►: [+22'±15']
Camber		0±30'. 88 ►: +13'±1°12'

Torque wrench settings820 MPI1986 to 1991

Cylinder head - stage 1	Nm	45
- stage 2	Nm	80
Cylinder head - stage 3	Nm	+ 60°, or 108 ⁵
- stage 4	Nm	_
Big-end bearings	Nm	55
Main bearings	Nm	105
Clutch cover	Nm	26
Flywheel [driveplate]	Nm	85 [110]
Front hubs	Nm	290
Rear hubs	Nm	245
Wheel nuts / bolts	Nm	72
Spark plugs	Nm	18

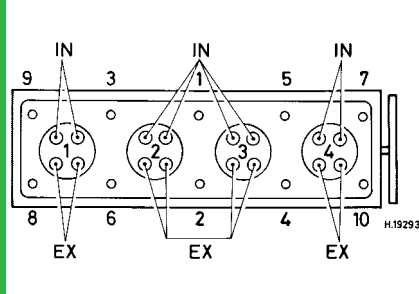
Capacities820 MPI1986 to 1991

Engine oil & filter	litres	4.5
Gearbox - 4-speed [5-speed]	litres	2.3
Automatic transmission - refill	litres	2.0
Final drive	litres	WT
Cooling system	litres	10.0
Fuel tank	litres	68

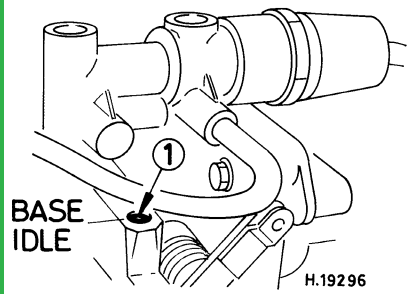
Notes and Illustrations

- ¹1988 ►: Base: 750±50
- ²1988 ►: 0.85
- ³205/55x16
- ⁴195/70x14 and 195/65x15: 1.8 / 1.8. 205/55x16: 2.2 / 2.2
- ⁵Whichever occurs first

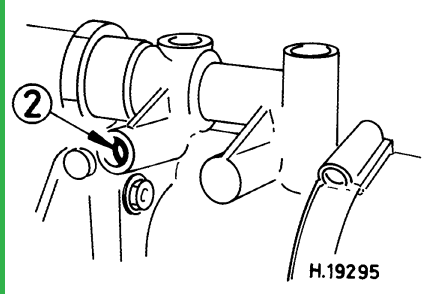
1: Idle speed 2: CO / Mixture



1994 cm³, 16V



Rover MPI



Rover MPI