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

820 SPI 1986 to 1990

Type		M16e, 20 HD DOHC
Capacity (cm³) / number of cylinders		1994 / 4
Compression ratio / pressure	bar	10.0 / _
Oil pressure	bar	0.7 [3.8]
Oil temperature	ºC	_
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	ºC	88
Radiator cap pressure	bar	1.04

Fuel system

820 SPI 1986 to 1990

Idle speed - manual [auto]	rpm	Base: 650±50 [600±50]
Fast idle speed - manual [auto]	rpm	_
CO @ idle speed [3000 rpm] - see page VI	%	2.5±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		Rover
Type / ref		Single-point injection
Main jet / needle		_
Injection pressure	bar	1.0
Pump pressure	bar	4.1
Octane rating	RON	97[E 95 RON]

Ignition system

820 SPI 1986 to 1990

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	º (%)	_
Condenser capacity	µF	_
Rotation		Anticlockwise
Ignition timing - basic [static	º Crankshaft @ rpm	16 BTDC @ idle
V = Vacuum NV = No Vacuum		V
Total ignition advance	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Centrifugal check.	º Crankshaft @ rpm	Computer control
	º Crankshaft @ rpm	_
	º Crankshaft @ rpm	_
Vacuum range check	mbar	Computer control
Maximum vacuum advance	º Crankshaft	_
Spark plugs		Unipart/Champion
Type		GSP4662 or 3662 / RC9YC
Electrode gap	mm	1.0[1]

Electrical system

820 SPI 1986 to 1990

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 gear

820 SPI 1986 to 1990

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	195/70x14: 195/65x15:205/55x16
Estate / Van	Size	_
Pressure - front / rear - Saloon	bar	1.8 / 1.8[2]
- Estate / Van	bar	_
Front suspension / wheel alignment		
Toe-in (+) / Toe-out (–)	mm [º]	[0±8']
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 [º]	[+10'±4']. 88 ▶: +22'±12'
Camber		0±30'. 88 ▶: +13'±1°12'

Torque wrench settings

820 SPI 1986 to 1990

Cylinder head - stage 1	Nm	45
- stage 2	Nm	80
Cylinder head - stage 3	Nm	+ 60°, or 108[3]
- 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

Capacities

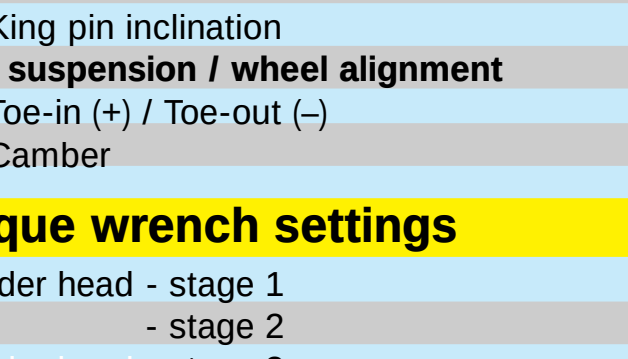
820 SPI 1986 to 1990

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

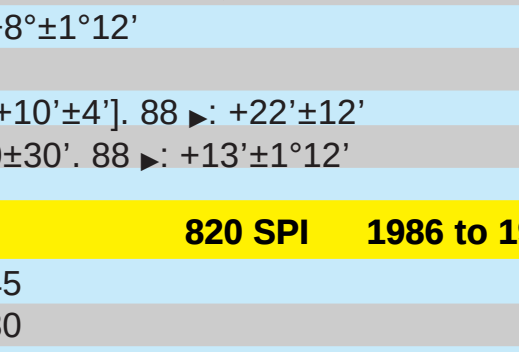
Notes and Illustrations

[1]**1988 ▶: 0.85**
[2]**205/55x16: 2.2 / 2.2**
[3]**Whichever occurs first**

1: Idle speed 2: CO / Mixture



1994 cm³, 16V



Rover SPi